Exploring Staff and Faculty Perceptions of the Impact of Non-inclusive Design on Student Mental Health in Higher Education: Awareness, Impact and Responsiveness.

Frederic Fovet

Thompson Rivers University ffovet@tru.ca

Abstract.

This study examined the perceptions of three stakeholder groups (faculty, instructional designers, and accessibility services personnel) in relation to the impact of the design of instruction and assessment on student mental health – within a post-secondary campus in Western Canada. The study adopts a broad post-modern paradigm when examining impairment and disability and focuses on the social model of disability as a lens. The methodological approach adopted draws from the phenomenological tradition, but also borrows some tools from narrative enquiry. Inductive coding was carried out to extract thematic categories from the initial 3 interviews. These categories were then used to carry out a thematic analysis of all 13 semi-directive interviews. The themes which emerged from the analysis with most impact include: (i) impact of faulty design on student mental health, (ii) varying stakeholder awareness of this impact, (iii) notion of context specific awareness, (iv) lack of tangible proactive intervention in this sphere, (v) lack of communication between stakeholders, (vi) tension between learner mental health and the notion of challenging pedagogical outcome. The findings overall suggest that a significant degree of awareness does exist across the campus in question with regards to the impact of design of the learning experience on the mental health of students. The degree of awareness about the impact of design on student mental health varies depending on the stakeholder involved and the context, but little proactive intervention to frame guidelines, for inclusive redesign that might be conducive to good mental health, is observable in this post-secondary landscape. Communication across campus stakeholder groups is identified as a significant obstacle to transformation. The article widens the contextualization of these findings through the lens of an ecological analysis of power dynamics and communication patterns in relation to teaching and learning across a campus.

Keywords: Accessibility services personnel; Communication; Ecological lens; Higher education; Inclusive design; Instructors; Instructional designers; Mental Health; Universal Design for Learning.





1. Introduction and Context.

Mental health (MH) issues have risen significantly in the student population within higher education in Global North countries in recent decades (Smith & McLellan, 2023). There have been various hypotheses to explain this sharp rise (Campbell et al., 2022; Hammoudi Halat et al., 2023). There have also been efforts to multiply intervention formats and the level of service provisions (Wagner et al., 2023; Hyseni Duraku et al., 2023). There is unmistakably evidence of increased awareness around the issue of student mental health (Van Eekert et al., 2023; Zaza & Yeung, 2023), with specific attention being given to suicide and suicide ideation on campuses, as well as suicide prevention (Buhran et al., 2023; Gallagher et al, 2023).

However, there is a global tendency within the literature and field initiatives to consider MH as a student characteristic, an outside variable that learners bring to the academy, and not as a phenomenon directly connected to the processes, cultures, mindsets, and practices of the post-secondary sector (Bantjes et al., 2023; Lewis & Smith, 2023). This reflects a wide deficit model approach to mental health, in a process that characterizes MH as a diagnostic label (Long, 2023; Palma et al., 2023). It also characterizes a current neoliberal approach to education where risk management and avoidance of exposure to liability prevail over the exploration of educational factors which may be detrimental to learners. A neoliberal approach focuses on a business model approach to education and encourages a free market approach to educational management (Peters, 2021). There is obviously, therefore, within this model a reluctance to explore to what extent the institution itself, or the teaching and learning model, may exacerbate student MH. The post-secondary campus, as a result, is seen as the location of the MH manifestations but there is opposition in the current higher education discourse to seeing it a playing a part in the phenomenon in any causal way (Treleaven, 2022).

2. Literature Review.

The literature review examines the various facets of this landscape. These dimensions are at times distinct from one another, but an overview of all these existing stances to design and MH is necessary to be able to fully grasp the complexity of the current tension that will be discussed in the study itself.

2.1 Design of the learning experience in higher education.

It would be fair to say that awareness of and comfort level around design in teaching and learning is still generally low in the post-secondary sector (Pan & Thompson, 2009; Schell, n.d.). Perceptions of self-competency in teaching and learning are not inherently high as many instructors see themselves as content experts rather than as pedagogy experts (Gratz & Looney, 2020; Price & Regehr, 2022). Interest for the scholarship of teaching and learning still rates low within faculty priorities (Cornejo Happel & Song, 2020). Engagement with key concepts of design and user experience is even lower than the broader activity of HE instructors within the scholarship of teaching and learning which is poor in the first place (Mueller et al., 2022). As for the relation of faculty to instructional designers globally, it is still tenuous as a result in most jurisdictions and on most campuses (Tate, 2017); it is an interaction which appears often limited to institutionally mandated and procedurally embedded 'check-ins' that purport to simply confirm faculty compliance with basic requirements or campus policies (Chittur, 2018). There are, of course pockets of best practices around design (FLOE, 2024); some communities of practices, in particular, develop transformative initiatives and propose new pedagogical models that adopt a design stance (Galvin & Geron, 2021), but the critical mass of HE practitioners still feel that design is daunting and requires expertise that they have not been given opportunities to develop (Collier, 2020).

2.2 Universal design and universal design for learning in higher education.

Interest inUniversal Design for Learning (UDL) had grown progressively across the post-secondary sector over the last decade (Gawron et al., 2024). UDL represents a sharp departure away from the traditional management of disability through the reasonable accommodation process. UDL is grounded in the social model of disability and translates it into action. The social model argues that disability is not an inherent individual characteristic but rather amounts to a tension between individual embodiments on the one hand, and spaces, products, and experiences that are not designed for the full diversity of users, on the other (Hogan 2019). UDL shifts the focus away from learner exceptionality and encourages instructors to design instead for a broad diversity in the student body, that is seen as a given. By designing proactively for diverse learners and their preferences, UDL encourages instructors to inject flexibility through a hands-on process of inclusive design. Barriers to

learning are identified at the blueprint level and removed ahead of classroom time, rather than after the fact, as is the case for retrofitting (Rao & Meo, 2016). UDL has roots in Universal Design, which is an architectural tradition which has challenged architecture's overfocus on the aesthetics of buildings and encouraged instead a focus on the user experience (UX), exploring the needs of preferences of potential occupiers (Mansoori et al., 2024; Zallio & Clarkson, 2023). UDL similarly encourages educators to go beyond the surface aesthetics and priorities of traditional teaching and learning, to focus on the learner's authentic preferences and habits (Fleury & Chaniaud, 2023). Educators, as a result, take on the stance of an inclusive designer, step outside of the narrowness of their own habits and assumptions, and explore the learner's expectations within the learning experience (Edyburn, 2021).

2.3 Learner mental health in the tertiary sector.

There has been much wider awareness of MH in HE in the tertiary sector in the last decade (Moghimi et al., 2023). The number of students reporting MH issues has increased rapidly (House et al., 2020). There is increased availability of support services (Chavajay, 2013; Sakız & Jencius, 2024). There is also much more prominence of MH within the suite of support offered by accessibility services. This is not always an observation that is universally made across the globe: in North America, MH is routinely seen as a disability in the educational sector, for the purpose of legislative protection against discrimination in access to learning (Bartolo et al., 2023); in some European countries, however, there is persisting tension between the disability movement and the field of MH, and these issues are approached differently when it comes to accessibility and learner support (Mcallister, 2020).

Even in jurisdictions where MH is approached from the wider lens of disability and within the legislative protection for accessibility, there is tangible reluctance for advocates and support services to fully embrace MH as a disability per se (Anandavalli et al., 2020). In several jurisdictions, it is classified as a temporary condition at best, not always giving students the right to full disability services in HE (Leow et al., 2024). There is also some hesitation when it comes to connecting solutions to MH issues with the removal of barriers through inclusive design of learning experiences (Hick et al., 2009; McCloud et al., 2023). Another point of tension in this area is the overlap that exists between intervention models that are internal to tertiary institutions (accessibility, counselling and support services) and those which are community based (Open Access News, 2023). Lack of funding and inadequacy of current funding models are also highlighted in the literature (Dombou et al., 2023).

2.4 Connecting design to learner engagement and disposition.

The receptiveness of faculty to notions of design in teaching and learning has been described above as poor. Even when instructional design is explored by instructors, the focus of their reflection is mostly the impact on assessment and overall immediately tangible learning outcomes (Bray et al., 2024). The quantifiable objectives of most initiatives focusing on design have therefore been narrowed down to academic outcomes, not student behaviour or emotions (King-Sears et al., 2023; Rao et al., 2018). In education as a field, it can be argued that there has been a degree of hesitancy, in any event, to connect the notion of design of the learning experience with the concepts of learner attention, learner compliance, learner disposition, or even learner behaviour (Fovet, 2020). The sector has historically considered leaner engagement, disposition, or behaviour as standalone phenomena, rather than as variables connected to the quality of the design of the learning experience (Pintrich, 2004; Evanick. 2023). While the literature on learner engagement is broad, there is a reluctance to connect this concept to the responsibility of the instructor as designer or to the quality and effectiveness of the instruction itself. There is even less openness among faculty to connect the design of the learning experience to deeper and aspects of leaner disposition and engagement, such as their mental health.

2.5 The impact of the COVID pandemic and the online pivot.

The implications and repercussions of the COVID pandemic and of the online pivot have been numerous and complex. The first theme which emerges from the literature is that the pandemic has had dramatic impacts on student MH (Riboldi et al., 2023). There have been challenges with access to support services, loss of social capital, increased financial hurdles, and the appearance of new barriers in accessibility to learning (Lisiecka et al., 2023). There have been many instances of documented rise in barriers to learning caused by inadequate last-minute design of alternate online learning (Kourea et al., 2021). The so called 'contingency pedagogy' has created accessibility issues for a vast percentage of learners, beyond students with disabilities (Li et al., 2023). The pivot to online teaching had a documented further impact on student MH (Rutkowska et al., 2022). On the other hand, however, the pandemic has also increased faculty awareness of inclusive design and made many instructors far more receptive to UDL (Kilpatrick et al., 2021). The sharing of resource

and knowledge on UDL has also reached an unprecedented peak during the pandemic itself (Fovet, 2022; Kim & Olesova, 2022; Kilpatrick et al., 2021).

3. Theoretical Positioning.

The study adopts a broad post-modern paradigm when examining impairment and disability, focuses on the social model of disability as a lens. The social model of disability challenges bio-medical concepts of disability and positions it instead as a social construct (Goering, 2015). The social model falls within a wider post-modern tradition which challenges power and the hegemonic shaping of public discourse, and of worldviews through this discourse (Carling-Jenkins, 2009; Murphy & Perez, 2002). Post-modern analysis encourages individuals and scholars to reject the interpretations of social phenomena and interactions that are perpetuated by majority discourse and hegemonic group dynamics (Campbell, 2018). The social model of disability instead argues that while impairment is a bio-medical reality, disability itself is the result of the tension which exists between personal embodiments and spaces, environments, products, and experiences which are not designed to address and welcome the full diversity of users (Lawson & Beckett, 2021).

4. Methodological Stance.

The methodological approach adopted draws from a broad interpretivist tradition (Leitch et al., 2010; McChesney & Aldridge, 2019). The interpretivist paradigm focuses, within social sciences research, on the exploration and analysis of subjective constructs of reality around phenomena in the context of social interactions (Chen et al., 2011; Hamilton et al., 2024). The individual meaning making of individuals and stakeholders is often key to understand and navigate social interactions and dynamics (Chowdhury, 2014) and will lead to rich insights into intervention models, and approaches to the framing of policy. This interpretivist orientation leads to the use of phenomenology in the study, as methodological process (Wertz, 2023). Phenomenology translates interpretivist objectives into methodological processes by exploring, capturing, and analyzing individual experiences that amount to making sense of phenomena, which are occurring in professional contexts in this project (Alhazmi & Kaufmann, 2022). In education specifically, this focus on subjective constructs and meaning making related to phenomena occurring within learning spaces is powerful, as it allows researchers to grasp the complexity of stakeholder perceptions and experiences, as well as the tension that

can exist between these stances (Bonyadi, 2023).

This study also borrows some tools from narrative enquiry. Narrative enquiry is a methodological process which examines the story telling of participants in the field in order to extract key thematic threads that give insights into meaning making, constructions around phenomena, and individual efforts to structure meaningful experiences in social contexts (Colla & Kurtz, 2024). In educational landscapes, these narratives offer us tangible ways to capture meaning making in relation to professional challenges, to new and emerging issues, and to the way individual stakeholders navigate every day learning experiences (Barrett & Stauffer, 2009; Reyes & Duran, 2024). This study uses elements of narrative enquiry in the way it creates and nurtures a rapport and flavour, during the semi-directive interviews, that give free reigns to participants to fully describe the experiences they have had with student MH and the design of learning experiences. The interviews sought out authentic narratives across varied experiences related to student MH and inclusive design.

The study focused on examining the perceptions of three different stakeholder groups within a mid and large size campuses in Eastern and Western Canada, to explore the ways a connection was perceived or acknowledged between the design of the learning experience and the MH of students. The three stakeholder groups selected were faculty, instructional designers, and accessibility services personnel, and they were chosen as each group has some insight into the challenges faced by students within learning and into their MH issues. The sampling method was a mixture of both convenience sampling (as the investigator has organic preexisting relationship with members of all three groups across various Canadian campuses) and purposive sampling (as the overall aim was to capture diverse voices from all three stakeholder groups).

In the end, 13 semi-directive interviews took place and this involved four faculty members, four instructional designers, and 5 accessibility services staff members. The participants were employed across Canada, with Ontario, Quebec, Prince Edward Island, Alberta, and British Columbia represented. The interview length varied between 60 and 75 minutes. The interviews took place online using a video conference software. The timeline for the study was originally six months but was considerably affected by the outbreak of the COVID pandemic; while interviews were scheduled with some ease when the participant pool was contacted, many had to be rescheduled because of the participants' workload pressure during the online pivot. It took 14 months for all interviews to be completed.

Ethics approval was obtained through the research ethics board of the institution with which the author was employed. There were no challenging ethical concerns in relation to power dynamics between interviewer and participants, as the existing connections between investigator and participants were those of colleague, professional acquaintance, or peer within the discipline of inclusion and accessibility. The investigator has never had a position of authority in relation to any of them. As the participants are spread across Canada and are employed on a variety of campuses, there were no tangible concerns about confidentiality in relation to the comments shared. None of the participants were engaged professionally with one another on the same campus and none had the same employer.

Inductive coding was carried out to extract thematic categories from the initial three interviews. These categories were then used to carry out a thematic analysis of all 13 semi-directive interviews once completed and transcribed. The emerging themes which were identified within the manual inductive coding of the first three transcripts were as follows – these categories were found to remain adequate when the rest of the transcripts where later coded using the six original themes: (i) impact of faulty design on student mental health, (ii) varying stakeholder awareness of this impact, (iii) notion of context specific awareness, (iv) lack of tangible proactive intervention in this sphere, (v) lack of communication between stakeholders, (vi) tension between learner mental health and the notion of challenging pedagogical outcome.

5. Findings and assertions.

The findings are presented in a format that mirrors the emerging codes previously listed above and used during the thematic analysis. They appear in a linear order that does not imply any degree of priority or urgency; nor does the order reflect any notion of frequency of occurrence of these themes.

5.1 Impact of faulty design on student mental health.

One of the key take-away from the data analysis is that all stakeholders interviewed were conscious, to a degree, of the role learning design played on student MH issues.

5.1.1 Faulty design as trigger of existing MH issues.

All participants acknowledged their awareness of the impact of learning design on existing student MH issues. Here they discussed mostly students who were known to them for using accessibility services for their MH needs. They provided specific examples of classroom practices that they have observed exacerbating student MH issues, notably assessment practices, but also some class activities such as the flipped classroom, rigid participation requirements, requests for and use of public speaking, certain attendance policies, etc. The assessment practices described included strict submission deadlines, key assessments distributed poorly across a course, evaluated classroom presentations, unmonitored group work which had degenerated, and the imposition of processes the students were not familiar with, particularly the use of certain software tools, etc. The participants describe the impact of design on existing student MH as being considerable and several interviewees described students abandoning courses or dropping out of programs as a result of these design issues.

5.1.2 Faulty design as generator of MH issues.

Interestingly, the majority of participants went further than this initial observation and described instances where the issues with learning design possibly actually caused student MH issues, rather than simply exacerbated them. Several participants had examples of students developing stress and anxiety issues as a result of departmental practices, or of specific demands from individual instructors. The participants did not observe these MH emerging in their own practice, but described being told of such incidents occurring in courses they were aware of within their institution. This is an acknowledgement that has considerable impact. It is significant that individual participants are willing to admit that the design of some learning experiences may create and trigger some student MH issues, when campuses themselves are very cautious to admit such responsibility, across the current tertiary global landscape (Campbell et al., 2022; Flannery, 2023).

5.2 Varying stakeholder awareness of this impact.

The striking distinction noted between participants in this study is the great divergence in the degree of individual awareness about the connection between learning design and student MH. They all acknowledged this connection but the depth of their reflection on this phenomenon varied greatly.

5.2.1 Intuitive awareness and understanding.

Several participants described an implicit or intuitive understanding but have few observations to analyze this, or reflect on it proactively, or even formulate any implications based on this sense that learning design matters when it comes to student MH. For several of the participants interviewed the connection between design and MH remained conceptual and they readily acknowledged that they were relying on anecdotal empirical observations when they were developing an individual construct around this notion.

It is important to note that there may have been a degree of reluctance of some to reflect further on this issue; there is an undeniable avoidance for many HE practitioners when it comes to discussing MH generally. The over-pathologization of MH over the last three decades (Beeker et al., 2021) undeniably makes some participants feel as though they should not position themselves on MH if they are not clinicians. Some participants claim being not sufficiently knowledgeable on the subject to venture professional opinions. These observations within the study mirror some of the key findings in the literature concerning the reluctance of many tertiary professionals to discuss MH. One interviewee suggested:

With mental health, it's not the same, it's a harder conversation for people to have, it's harder to measure, and I think it can feel, that for many people, they don't want to go there; like if I open that door, am I going to then have to be that caring person all the time or be that support person. And I think when people are already stretched, they don't want to have that conversation, they're frightened to have that conversation, or tentative (P7).

There may also be a reluctance of many to discuss MH as they may have certain fears regarding its impact on them as professionals. They may themselves be battling with their own MH issues or diagnosis. It is striking to see the extent to which MH is a taboo subject within HE professionals themselves, despite the fact that its impact reaches endemic proportions in the sector (Cassidy, 2023; Hammoudi Halat et al., 2023). There is undeniably a degree of fear among HE professionals that they open up their own vulnerabilities when discussing these issues in relation to students. Some participants acknowledged this phenomenon.

5.2.2 Lack of knowledge and lack of familiarity with UD and UDL discourse.

If the degree of awareness surrounding student MH and the impact of design varied widely among participants, so did their degree of awareness of UDL. Some of the patterns observed in the study reflect those identified in the field more widely: a small proportion of HE professionals have in-depth knowledge of UD and UDL. It is worth noting that since convenience sampling was used here and since the investigator is a UDL specialist, the proportion of participants with a working knowledge of UDL was perhaps unusually high. Others have no exposure to these notions at all, or even to inclusive design more generally. A widely observed trend in education is the fact that many teachers feel they have no understanding of, training in, or awareness of design as a process (Myri, 2022).

A third grouping of participants has some understanding of UDL but stated they were not sufficiently at ease with the framework to be able to relate it to MH. This is a crucial observation as it suggests that a feeling of competency with inclusive design and UDL is required before practitioners feel they clearly understand specifically what work they need to carry out as a design reflection to have substantial positive impact on student MH. Since the stakes are so high, and the fears so real, HE practitioners will need to have a high degree of competency and self-efficacy in UDL and inclusive design before they venture in this area. As one participant remarked with lucidity:

Instructors at the university level, I remind myself of this too, they're educators, but they're not trained to be educators for the most part. They're subject experts, but subject experts don't necessarily have the training or expertise that comes with an education degree and I'm not advocating that everyone needs an education degree, but I do think that sometimes we put a lot of expectations on instructors to know something but how could they possibly know this unless we help them learn that themselves (P7).

5.2.3 Explicit awareness of mental health as central teaching and learning challenge and urgent area of reflection.

If the comfort level of participants with UDL and MH varied greatly, there is on the other hand consensus among them more generally that important transformations of HE teaching and learning are due; there is also an intuitive understanding that student MH is impacted by the current status quo in pedagogical change. All participants made some connections between

archaic and obsolete classroom practices and student MH. It is important to note that some of the comments shared related to other aspect of pedagogical change than UDL per se. Many discussed a need for more student-centered teaching and learning, or an urgency for more constructivist flavours in HE pedagogy. Other discussed the notion of active learning. It was therefore not just inclusive design that was seen by participants as having an impact on student MH, but pedagogy more generally. One interviewee suggested:

Maybe it starts with people being willing. I'm coming back to holistic pedagogy, being willing to be a person. Not just a role. So that instructors not just offer students support, but allow students to bring their whole selves to the learning experience and encounter. But also be willing to do that themselves, maybe there's a fear there too? Like stepping outside of the professional (P4).

There was also a realization that very little progress and transformation had been achieved in recent decades in terms of updating HE teaching and learning, despite a dynamic scholarship continuously suggesting areas of change (Cappiali, 2023). Some expressed frustrations about resistance at departmental level or on an institutional scale.

5.3 Notion of context specific awareness.

Beyond individual discrepancies in the degree of awareness of each participant, it becomes apparent that the three stakeholder group also demonstrate varying receptiveness to this topic as a professional cluster.

5.3.1 Degree of understanding among all three stakeholder groups.

Accessibility services personnel had as a group the highest degree of awareness of the connection between design and student MH. Faculty members came next, and instructional designers as a group had the lowest awareness of this potentially causal relationship. This can be explained in the case of instructional designers by the fact that they normally have very few interactions with learners.

5.3.2 Notion of complimentary awareness and sensitivity leading to the concept of opportunity for interdisciplinary collaboration.

The striking observation is that the three stakeholder groups focused on different aspects of the relationship between design and student MH. They offered insight into different facets of this topic, and adopted differing stances that offered complimentary perspectives. As whole, the perspectives of the three stakeholder groups offered a detailed understanding of the complex relationship between design and student MH, but each of the groups only had a piece of the puzzle so to speak. This highlights the need for effective interdisciplinary collaboration and effective dialogue since, together their understanding would be optimal and comprehensive. This echoes the core tenets of phenomenology, which as a theoretical paradigm argues that subjective constructs of a phenomenon – and meaning making in relation to it - can vary from individual to individual (Williams, 2018). As whole, though, a myriad of phenomenological insights offers a broad understanding of a complex issue in social contexts. This theme suggests that there should be an urgent push for more collaborative interdisciplinary and collaborative initiatives in HE in relation to inclusive design and MH. It is urgent to erode what several of the participants described as siloed processes; this notion of siloed expertise is echoed critically within the literature (Barnes et al., 2024; Kirwan et al., 2022).

5.4 Lack of tangible proactive intervention in this sphere.

Awareness does not always equate to a willingness to act and the resignation with the status quo in this area is one of the most striking observations in this study.

5.4.1 Characteristic inaction.

Despite a degree of awareness within each stakeholder groups about the impact of learning design on student mental health, each participant acknowledges complete inaction in this field, beyond their own practice and the ambit of their role. They all report doing their best to consider inclusive design and its impact on learner MH within the sphere of their own area of expertise, but have little faith anything is happening around them at institutional level. Their own tangible degree of impact often is related to specific students or student files. It amounts to retrofitting, rather than to a proactive focus on the redesign of learning experiences on the basis of their understanding of its impact on MH.

5.4.2 Lack of comfort with problem solving in relation to teaching and learning on a whole campus scale.

Action in this area would amount to a global reflection and transformative action on teaching and learning within each of the campuses in question. The feedback from the majority of

participants is that they feel transformation of teaching and learning – in terms of institutional mandate or embedded mission statement – lies outside their control. Shifting teaching and learning practices across large tertiary organizations is tricky and the literature acknowledges that current model are not as effective as they could be, in the sense that they cater for the needs of faculty who are already involved in a pedagogical reflection but fails to attract those who are not (Hoessler et al., 2024). The modus operandi of teaching and learning units is critiqued for its inability to create a significant momentum for change (Burns et al. 2013; Trigwell et al., 2012). The comments of participants here mirrored these observations in the scholarship. This is a problematic phenomenon, as it allows a process of disempowerment on the part of individual actors in this landscape who reject responsibility in this area, on the basis that the scope of the process of change is too daunting.

5.5 Lack of communication between stakeholders.

Challenges related to communication between these three stakeholder groups emerge as a central – and perhaps surprising – concern in the study. All participants indicated significant hurdles in communicating their authentic thoughts on the impact of learning design on student MH to the other stakeholder groups, both generally as part of routine institutional processes, or even when it related to a specific student case file. The only exchanges which the participants report are formal, hierarchical, and procedural.

5.5.1 Impact of status and hierarchy in stakeholder communication.

The only channels of communication related to the themes raised in this study were procedural: these would be either annual review discussions about course design/ course outlines – often themselves part of a routine annual rubberstamping process that involves only superficial scrutiny -, or discussions about reasonable accommodations. Beyond these purely administrative channels, the participants discussed their inability to initiate or sustain free-flowing, reciprocal, and informal discussions that might relate to course design or to MH. They acknowledged that campuses are stratified environment where clear power dynamics and issues of status and hierarchy prevail. One participant said:

Wherever I have worked, there are hierarchies. And there are political hierarchies and there are political alliances, and so on, and so forth. And you think: where can I actually speak freely about this? (P4)

The power dynamics between stakeholder groups are historical and solidly embedded in

campus processes. Instructional designers in particular feel they can only discuss best practices in relation to inclusive design when contacted by faculty with a clear and direct enquiry. They do not feel that they can suggest a redesign of assessment or activities spontaneously. Accessibility services describe being aware on repetitive issues with certain courses, their designs, and the impact on student MH, but they feel ill equipped to bring this to the attention of faculty members. Faculty members discuss being isolated from services and not always sure as to whom they should reach out to, beyond their own department.

5.5.2 Resignation in relation to siloing of campus structures.

There was a noticeable degree of resignation among participants in relation to this lack of interdisciplinary communication, effective collaboration around learning design and its impact, or even around the siloing of structures in the tertiary sector. There is both an acknowledgement of the ecological complexity of these issues, and a feeling that these challenges are too broad and too historically embedded to be able to be resolved by the practitioners in question. This resignation is problematic as it relates to the notion of fixed mindset which will be discussed later.

5.6 Tension between learner mental health and the notion of challenging pedagogical outcomes.

A theme which is woven through the conversations with stakeholders is the delicate tension that can exist between a design that creates a degree of concerns around learner MH and a design objective that responds to key pedagogical goals and preoccupations. This brings to the forefront the difficult question as to whether, within a UDL reflection on learning, activities that challenge MH should always be shied away from, even when they otherwise create authentic – if worrisome - learning opportunities.

5.6.1 Tension when design creates MH issues but also is part of growth process.

Several interviewees talked about some learning activities having the potential to exacerbate MH issues but also being key components of pedagogical growth. Some examples of these tasks were: group work, creative social constructivist activities such as the flipped classroom, experiential tasks that push a learner beyond traditional learning spaces and roles,

requirements to identify, access and use resources autonomously beyond course readings, and constructivist objectives such a project based learning. There is, from the perspective of the participants, definite risks that some of these activities may be perceived by learners as challenging, arduous, out of the ordinary, and to some extent triggering for MH.

However, the participants also acknowledged that an essential part of rich pedagogical transformation is creating authentic learning experiences that challenge learners out of their zone of comfort. The question that remained moot among the participants and to which they had no definite answer was whether inclusive design could and should still push a learner outside of their zone of comfort. Many pedagogical philosophies such as constructivism, experiential learning, and critical pedagogy readily conceptualize the notion of 'learner resistance' and explain that this feeling of discomfort is part of shifting learners out of otherwise overly passive conventional roles that reduce their agency. Similarly, the very notion of zone of proximal development in social constructivism implies a discomfort that pushes the learner beyond experiences already processed. The art here will therefore be in the detail and in achieving a healthy sustainable balance that can be achieved in the degree to which uncomfortable learning experiences can be weighed with more reassuring and predictable tasks.

5.6.2 Tension when design creates MH issues but is aligned with learning outcomes.

A theme that came up within all of the interviews is the degree to which even explicit learning outcomes can cause an exacerbation of MH issues among some students. In these instances, there is perhaps more reluctance from instructors to engage in inclusive design, suggested several participants. There was a near unanimous acknowledgement within the participant group that inclusive design and flexibility cannot be considerations that affect core learning outcomes. There is transparency, it is argued by some of the interviewees, in the terms of the details provide to students ahead of time in the course outline. The mechanism of add/ drop is also seen as sufficient to allow learners authentic insights into a course format, objectives, and outcomes, while maintaining learner accountability. Add/ drop is a mechanism by which, within the North American context, students can leave a course within the first few weeks without financial penalty or impact on their program grades. There emerges from the study, therefore, a notion of organic boundary to this reflection on inclusive design and MH, where students must also be granted responsibility for exploring course outcomes, assessing

their ability to meet these outcomes, and for choosing their course or program with scrutiny in light of their own MH challenges.

5.6.3 Need to be explicit about challenges in a learning experience.

Several interviewees discussed the balance described above where instructors must create inclusive conditions for learners with MH issues but also create transformative, authentic, and creative pedagogical experiences that push all learners outside their zone of comfort. Achieving this balance is tricky, several participants have shared within the study, but they saw this as part of a challenging and ongoing career long reflection on teaching and learning – a space where there are rarely any clean-cut or well delineated solutions. What most participants mentioned is the need to partake in dialogical practices with learners where context can be provided for the choices made that involve challenging experiences. As participant 1 states:

And so I will say to them, that this might feel really weird or uncomfortable and you may not know where to click or you may not want to turn this on or you may not want to do this, and that's ok (...) So I have tried to build an awareness of discomfort into my pedagogical approaches over the years.

6. Outcomes and Implications.

Beyond the specific assertions made regarding the current awareness of campus stakeholders of the impact of learning design on student MH, there are broader observations and implications that emerge from this study, which could affect the very fabric of post-secondary institutions in their current mindset and historical structure, were these reflections to be further developed, explored, and analyzed in the future by researchers.

6.1 Urgency of adopting and growing a campus discourse around UD and UDL.

The first implication of this project is the realization that, while the discourse on UD and UDL has grown in the tertiary sector over the last decade, awareness and use of UD and UDL remains sporadic, uncertain, and unsustainable to date. This was very tangible in relation to the relative uncertainty -or even wobbliness - several participants expressed when engaged on the impact of UDL in this area. A wide reflection around the strategic and organizational

challenges that hinder the broadening of the UDL momentum is necessary, in parallel to the key concerns developed in this study (Fovet, 2021). There has been too much focus in past years on the implementation of UDL in the classroom, and too little focus on the notion of management of change at institutional level. Implementing UDL across institutions remains challenging and, to date, is a utopian goal rather than a tangible process in action. All participants have acknowledged the considerable task that remains ahead in terms of reaching faculty who may be reluctant altogether to address or engage with UDL. The question as how best support faculty as a whole operate a systemic shift in mindset towards UDL remains to date unanswered and required urgent attention from researchers (Quirke et al., 2023).

6.2 Widening the UDL momentum to embrace MH.

There is clear ambivalence evidenced through this project of UDL advocates and practitioners when it comes to embracing the impact of inclusive design on learner MH. The discourse and literature on UDL have thus far focused on barriers experienced by students with disabilities, but there is a reluctance to acknowledge the fact that in the tertiary sector MH issues might actually be caused by design issues, just as is the case for impairments more generally. More explicitly, there is a degree of hesitation when it comes to applying the social model of disability to MH concerns. There is a need for a change in mindset among UDL practitioners in order for the discourse and the reflection around inclusive design to be fully extended to MH. There is currently a lack of literature, a reluctance to focus research on this topic, and a lack of resources and professional development for tertiary sector professionals (Takacs, 2021).

6.3 Importance of developing learner agency and voice in relation to universal design.

An element which has been characteristically absent from the discussions within this project, is the role that students play in developing the discourse on MH and inclusive design and in amplifying these issues across tertiary campuses. This is true more widely about the entire contemporary scholarship on UDL which discusses the conceptual role of students and their agency but provides little evidence of current efforts to involve students and support student voice (Fovet, 2018). While it is essential to highlight the need for better and more transparent

communication between the three stakeholder groups selected here, recommendations should include examining the landscape, in the future, in terms of four stakeholder groups. A vast shift in mindset is required to ensure students become empowered within the UDL movement in HE and this will hopefully be the focus of emerging research and field initiatives. It is important to stress that participants were all in favour of student involvement in the UDL discourse across their campus but could not attest to much movement being achieved in this respect.

6.4 Embracing sensitive issues within a fragile neoliberal landscape of visibility and marketing.

The project has examined the relationship between MH and inclusive design within the complex space of tertiary campuses and has brought to the surface rich and complex individual and institutional factors which hinder the way the sector acts on the emerging awareness it has developed in this sector. It is time, however, to compliment this reflection with a macroscale analysis of societal and economic trends that also impact this phenomenon. Beyond the specific concerns of individual participants on their respective campuses, there are wider variables that affect the post-secondary sector as a whole; these too have an impact on the phenomenon which was the target of this study. Neoliberalism is one of these factors (Olssen & Peters, 2005). Neoliberalism is the theoretical lens which has been dominant for the past three decade in the management of the tertiary sector (Morris & Targ, 2022). It argues that education, just like any sector of the economy, will perform optimally if left to the mechanisms of free market enterprise. This business model approach imposes a lens of efficiency, performance, and branding on tertiary campus activities and their sustainable development (Balan, 2023). This focus on competitiveness, branding, and market image has a direct impact on the central theme of this study. Indeed, it is clear that within this business model, campuses will be extremely reluctant to acknowledge MH issues, their growing prevalence, or the degree of responsibility their teaching and learning model may play in the appearance or exacerbation of these MH concerns. The neoliberal focus on marketing and visibility creates opacity around the phenomenon and makes all campuses reluctant to accept ownership over the issue (Altman & Altman, 2022; Morris, 2022).

6.5 Importance of ecological approach to complex campus variables.

An important take away from this project is that it re-affirms the complex nature of UDL implementation across the tertiary sector, and more broadly the breadth and magnitude of the management of change process that is required across the landscape. This was tangible in terms of the hesitation of the participants with regards to the erosion of silos currently in place within inclusive design and UDL initiatives, the creation of interdisciplinary dialogues on UDL and MH, or even their hesitancy with UDL as a systemic process of change across tertiary institutions. There has been much wishful thinking over the past decade on the part of UDL researchers which assumed that by providing evidence as to the benefits of UDL for the inclusion of diverse learners, this would be sufficient to impact policy and practices in the post-secondary sector.

The tertiary sector is an environment that is generally resistant to change (Marom, 2023) and there will need to be ample literature to guide campuses as to the way to widen the UDL discourse across institutions. This is a strategic and organizational challenge which requires attention, resources, effective insights, and effective managerial tools. A key pre-condition to developing such support for broad systemic change across institutions is to adopt a theoretical lens that offers a rich and nuanced overview of the complexity of the task ahead. While UDL implementation has been approached through either a biomedical neurocognitive lens, or vice versa a post-modern theoretical stance connecting it to the social model of disability, these choices of paradigms have hindered strategic and organizational analyses of challenges. Using an ecological lens to explore, document, and analyze managerial dilemmas will be more conducive to developing acumen in relation to change (Fovet, 2021): it allows researchers to examine who has ownership over implementation, who brands the need for change, who lends their resources, and who is responsible for the effective communication of UDL priorities, and then them assess how these institutional identities that are driving the UDL momentum are themselves impacted by numerable complex variables.

6.6 Hurdles to communication between stakeholders in relation to inclusive design.

There is a stand-alone outcome emerging from this project which in itself has little to do with UDL or with MH. The study has highlighted the profound degree to which communication

between faculty, instructional designers, and accessibility personnel is challenging and fraught with difficulties. This assertion could be widened to other stakeholder groups across tertiary campuses. Communication lines are complex in subtle ways, because of the historical impact and weight of hierarchical and siloed structures. These units and their portfolio are not just segregated; they are also stratified in the sense that each carries very different power, status, and symbolic autonomy. None of the participants interviewed felt they had the freedom to initiate a collegiate, reciprocal, or spontaneous dialogue with another stakeholder group, in ways that would not be formal, transactional, and pre-scripted through procedural and administrative processes. Few windows existed, based on these participants' narratives, to trigger or nurture authentic interdisciplinary dialogue on UDL and MH, or on any other urgent issue regarding course design and equity, diversity and inclusion (EDI). This article is therefore a call for action for all involved in social justice and inclusion work in the tertiary sector to reflect on a new interdisciplinary modus operandi that might support more transformative and collaborative reflections, and yield sustainable change.

6.7 Impact of growth mindset on willingness to develop a proactive discourse of change.

Connected to the theme of ecological awareness of the complexity of change on post-secondary campuses discussed above, the project highlights the need for a growth mindset when it comes to UDL implementation, and EDI strategic objectives more broadly. Growth mindset is currently popular in the literature on leadership in educational spaces and consists in focusing on the ability of environments and individuals to grow, adapt, and integrate theoretical know-how and evolving best practices from the field (Dweck, 2016). Growth mindset is a term that repackages much of the current discourse on transformational and democratic leadership models (Lin et al., 2022). While growth mindset is immediately conceptually appealing when examining the stakes discussed in this study, there is also some evidence that fixed mindset might be prevalent in respect to teaching and learning practices in much of the tertiary sector globally (Gratz & Looney, 2020; Sahagun et al., 2021). It is a sphere where faculty frequently perpetuate practices that they have themselves been exposed to as learners. Developing growth mindset in relation the transformation of teaching and learning is particularly challenging (Gorospe & Edaniol, 2022; Ribosa et al, 2024; Sahagun et al., 2021), and implementing UDL will broadly require an ambitious focus on altering mindsets

in tertiary sector (Lambert et al., 2023).

7. Further Research.

This study has brought to the surface many themes related to UDL and MH, that have thus far been ignored by the scholarship and avoided by UDL field practitioners. It has also showcased areas of extreme tension between competing priorities and pedagogical intentions. The study does not purport to solve these areas of tension or to offer recommendations that are immediately actionable. Instead, it is hoped that the six themes that have emerged through the inductive coding and which have supportive the thematic analysis of the data can serve in the future as points of reference to researchers as they continue to examine, analyze, and report on the impact of learning design on student MH. The outcomes of the study, on the other hand, can serve as a call for action for researchers and practitioners to explicitly integrate the seven highlighted implications for the field in the future development of UDL initiatives or critical research reflections on UDL growth.

8. References.

- Alhazmi, A. A., & Kaufmann, A. (2022). Phenomenological Qualitative Methods Applied to the Analysis of Cross-Cultural Experience in Novel Educational Social Contexts. *Frontiers in Psychology, 13*, 785134. https://doi.org/10.3389/fpsyg.2022.785134
- Altman & Altman (2022, December 6). *Parents Sue Stanford University for Wrongful Death after Daughter's Suicide*. Available: https://www.bostoninjurylawyerblog.com/parents-suestanford-university-for-wrongful-death-after-daughters-suicide/
- Anandavalli, S., Harrichand, J. J. S., & Litam, S. D. A. (2020). Counseling International Students in Times of Uncertainty: A Critical Feminist and Bioecological Approach. *Professional Counselor, 10*(3), 365-375. https://eric.ed.gov/?id=EJ1272036
- Balan, A. (2023). Neoliberalism, privatisation and marketisation: The implications for legal education in England and Wales. *Cogent Education*, *10*(2). DOI: 10.1080/2331186X.2023.2284548
- Bantjes, J., Hunt, X., Stein, D.J. (2023). Anxious, Depressed, and Suicidal: Crisis Narratives in University Student Mental Health and the Need for a Balanced Approach to Student Wellness. *International Journal of Environmental Research and Public Health*, 20(6), 4859. https://doi.org/10.3390/ijerph20064859

- Barnes, N., Fischer, S., & Kilpatrick, S. (2024) Going above and beyond: Realigning university student support services to students. *International Journal of Educational Research*, *124*. https://doi.org/10.1016/j.ijer.2023.102270.
- Barrett, M.S., & Stauffer, S.L. (2009). Narrative Inquiry: From Story to Method. In: M.S. Barrett & S.L. Stauffer (eds). *Narrative Inquiry in Music Education*. Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-9862-8 2
- Bartolo, P.A., Borg, M., Callus, A-M., De Gaetano, A., Mangiafico, M., Mazzacano D'Amato, E., Sammut, C., Vella Vidal, R., & Vincent, J. (2023). Aspirations and accommodations for students with disability to equitably access higher education: a systematic scoping review. Frontiers in Education, 8. https://www.frontiersin.org/articles/10.3389/feduc.2023.1218120
- Beeker, T., Mills, C., Bhugra, D., Meerman, S., Thoma, S., Heinze, M., & von Peter, S. (2021). Psychiatrization of Society: A Conceptual Framework and Call for Transdisciplinary Research. *Frontiers in Psychiatry, 12*.
 - https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2021.645556
- Bonyadi, A. (2023). Phenomenology as a research methodology in teaching English as a foreign language. *Asian Journal of Second and Foreign Language Education*, 8, 11. https://doi.org/10.1186/s40862-022-00184-z
- Bray, A., Devitt, A., Banks, J., Sanchez Fuentes, S., Sandoval, M., Riviou, K., Byrne, D., Flood, M., Reale, J., & Terrenzio, S. (2024). What next for Universal Design for Learning? A systematic literature review of technology in UDL implementations at second level. British Journal of Educational Technology, 55, 113–138. https://doi.org/10.1111/bjet.13328
- Buhran, L A., Abudasser, A.M., Alolah, T.A., Alshehri, A.A., Alshahrani, S.M., Alam, M.M., Ahmad, M.T. (2023). The knowledge and awareness of suicide and attitudes towards its risks in university students of Asir region of Saudi Arabia. *Journal of Family Medicine and Primary Care* 12(6), 1099-1105. DOI: 10.4103/jfmpc.jfmpc_2073_22
- Burns, S., Merchant, C., & Appelt, E. (2013). Campus survey on the status of the Scholarship of Teaching and Learning (SOTL) by health sciences faculty. *Education*, *133*(4), 502–512. https://www.ingentaconnect.com/contentone/prin/ed/2013/00000133/00000004/art00013
- Campbell, M. (2018). Postmodernism and Educational Research. *Open Journal of Social Sciences*, 6, 67-73. doi: 10.4236/jss.2018.67006.
- Campbell, F., Blank, L., Cantrell, A., Baxter, S., Blackmore, C., Dixon, J., & Goyder, E. (2022). Factors that influence mental health of university and college students in the UK: a

- systematic review. *BMC Public Health 22*, 1778. https://doi.org/10.1186/s12889-022-13943-x
- Cappiali, T.M. (2023). A Paradigm Shift for a More Inclusive, Equal, and Just Academia? Towards a Transformative-Emancipatory Pedagogy. *Education Sciences*, 13(9), 876. https://doi.org/10.3390/educsci13090876
- Carling-Jenkins, R. (2009.) A Way Forward: Presenting a Post-modern Framework for Disability. *Forum.* Pacific Rim Conference. Available: https://www.iimhl.com/files/docs/20150115a.pdf
- Cassidy, C. (2023, April 10) 'Appallingly unethical': why Australian universities are at breaking point. *The Guardian*. Available: https://www.theguardian.com/australia-news/2023/apr/10/appallingly-unethical-why-australian-universities-are-at-breaking-point
- Chavajay, P. (2013). Perceived Social Support among International Students at a U.S. University. *Psychological Reports, 112*(2), 667-677. https://doi.org/10.2466/17.21.PR0.112.2.667-677
- Chen, Y., Shek, D. & Bu, F. (2011). Applications of interpretive and constructionist research methods in adolescent research: philosophy, principles and examples. *International Journal of Adolescent Medicine and Health, 23*(2), 129-139. https://doi.org/10.1515/ijamh.2011.022
- Chittur, D. (2018). A Phenomenological Study of Professors and Instructional Designers during Online Course Development Leading to Enhanced Student-centered Pedagogy. [EdD. Thesis] Peperdine University. Theses and Dissertations. 935. Available: https://digitalcommons.pepperdine.edu/etd/935
- Chowdhury, M. (2014). Interpretivism in Aiding Our Understanding of the Contemporary Social World. *Open Journal of Philosophy, 4,* 432-438. doi: 10.4236/ojpp.2014.43047.
- Colla, R.H., & Kurtz, C.F. (2024). Storying Research: Exploring the Benefits of Participatory Narrative Inquiry as a Methodology for Wellbeing Research. *International Journal of Applied Positive Psychology*. https://doi.org/10.1007/s41042-024-00147-4
- Collier, A. (2020, October 26). Inclusive Design and Design Justice: Strategies to Shape Our Classes and Communities. *EDUCAUSE Review*. Available: https://er.educause.edu/articles/2020/10/inclusive-design-and-design-justice-strategies-to-shape-our-classes-and-communities
- Cornejo Happel, C.A., & Song, X. (2020). Facilitators and Barriers to Engagement and Effective SoTL Research Collaborations in Faculty Learning Communities. *Teaching and*

- Learning Inquiry, 8(2), 53-72. https://doi.org/10.20343/teachlearningu.8.2.5
- Dweck, C. (2016, January 13) What Having a "Growth Mindset" Actually Means. *Harvard Business Review*. Available: https://hbr.org/2016/01/what-having-a-growth-mindset-actually-means
- Dombou, C., Omonaiye, O., Fraser, S., Cénat, J. M., Fournier, K., & Yaya, S. (2023). Barriers and facilitators associated with the use of mental health services among immigrant students in high-income countries: A systematic scoping review. *PloS one, 18*(6), e0287162. https://doi.org/10.1371/journal.pone.0287162
- Edyburn, D. L. (2021). Universal Usability and Universal Design for Learning. *Intervention in School and Clinic*, *56*(5), 310-315. https://doi.org/10.1177/1053451220963082
- Evanick. J. (2023, August 24). The Role of Instructional Design Coaches in Promoting Online Student Engagement. E-learning Industry. Available: https://elearningindustry.com/role-of-instructional-design-coaches-in-promoting-online-student-engagement
- Flannery, M.E. (2023, March 29). The Mental Health Crisis on College Campuses. *NEA*.

 Available: The Mental Health Crisis on College Campuses | NEA
- Fleury, S., & Chaniaud, N. (2023). Multi-user centered design: acceptance, user experience, user research and user testing. *Theoretical Issues in Ergonomics Science*, *25*(2), 209–224. https://doi.org/10.1080/1463922X.2023.2166623
- Flexible Learning for Open Education [FLOE] (2024). *Inclusive Learning Design Handbook*. Inclusive Design Research Centre, OCAD. Available: https://handbook.floeproject.org/
- Fovet, F. (2022). UDL Implementation in Higher Education: Drawing lessons from the COVID online pivot and reconnecting with inclusive design in the face-to-face classroom. Paper presented at Australasian Society for Computers in Learning in Tertiary Education (ASCILITE) 2022 Conference, December 2022, Sydney.
- Fovet, F. (2021). Developing an Ecological Approach to Strategic UDL Implementation in Higher Education. *Journal of Education and Learning*, *10*(4).
- Fovet, F. (2020). Exploring the use of Universal Design for Learning to reengage Students with Social, Emotional and Behavioural Difficulties. In D. Ktoridou, E. Doukanari, & N. Eteokleous (eds.) Fostering Meaningful Learning Experiences through Student Engagement (Chapter 9). Hershey, PA: IGI Global
- Fovet, F. (2018). Exploring the Student Voice within Universal Design for Learning Work. *The AHEAD Journal, 8.* Available: https://www.ahead.ie/journal/Exploring-the-Student-Voice-within-Universal-Design-for-Learning-Work

- Gallagher, K., O' Brien, C., O' Driscoll, M., Ní Dhálaigh, D., Corcoran, P., & Griffin, E. (2023). Suicide prevention curriculum development for health and social care students: Protocol for a scoping review. *PloS one, 18*(12), e0285231. https://doi.org/10.1371/journal.pone.0285231
- Galvin, T., & Geron, M. (2021). Building a community of practice across an institution: how to embed UDL through the Plus One Approach between an academic and academic developer. In F. Fovet (Ed.) Handbook of Research on Applying Universal Design for Learning Across Disciplines: Concepts, Case Studies, and Practical Implementation. IGI Global, pp. 323-344. https://doi.org/10.4018/978-1-7998-7106-4.ch017
- Gawron, K., Tomlinson, M., Mohan, N., & Van Puymbrouck, L. H. (2024). A Scoping Review of Universal Design for Learning in United States Allied Health & Medical Education. *The Open Journal of Occupational Therapy, 12*(1), 1-14. https://doi.org/10.15453/2168-6408.2146
- Goering S. (2015). Rethinking disability: the social model of disability and chronic disease. *Current Reviews in Musculoskeletal Medicine*, 8(2), 134–138.

 https://doi.org/10.1007/s12178-015-9273-z
- Gorospe, J. D., & Edaniol, E. C. (2022). Resistance to Change and Work Engagement of the Faculty of Occidental Mindoro State College, Philippines. *Journal of Practical Studies in Education*, 3(4), 1-8. https://doi.org/10.46809/jpse.v3i4.50
- Gratz, E. & Looney, L. (2020). Faculty Resistance to Change: An Examination of Motivators and Barriers to Teaching Online in Higher Education. *International Journal of Online Pedagogy and Course Design (IJOPCD), 10*(1), 1-14. http://doi.org/10.4018/IJOPCD.2020010101
- Hamilton, R.A., Lond, B., Wilde, L. & Williamson, I. (2024). Understanding the lived-experience and support-needs of people living with antimicrobial resistance in the UK through interpretative phenomenological analysis. *Scientific Reports*, *14*, 3403. https://doi.org/10.1038/s41598-024-53814-6
- Hammoudi Halat, D., Soltani, A., Dalli, R., Alsarraj, L., & Malki, A. (2023). Understanding and Fostering Mental Health and Well-Being among University Faculty: A Narrative Review. *Journal of Clinical Medicine*, 12(13), 4425. https://doi.org/10.3390/jcm12134425
- Hick, P., Kershner, R., & Farrell, P. (2009). Psychology for Inclusive Education: New Directions in Theory and Practice. London: Taylor & Francis. https://doi.org/10.4324/9780203891476

- Hoessler, C., Banow, R., & Bull, H. (2024). SoTL Clusters: Faculty-Focused Needs-Based Scholarship of Teaching and Learning Support. *Journal of College Science Teaching*, 53(1), 24-30. DOI: 10.1080/0047231X.2023.2292403
- Hogan A. J. (2019). Social and medical models of disability and mental health: evolution and renewal. *CMAJ*: Canadian Medical Association Journal Journal de l'Association Médicale Canadienne, 191(1), E16–E18. https://doi.org/10.1503/cmaj.181008
- House, L.A., Neal, C., & Kolb, J. (2020). Supporting the Mental Health Needs of First Generation College Students. *Journal of College Student Psychotherapy*, *34*(2), 157-167. DOI: 10.1080/87568225.2019.1578940
- Hyseni Duraku, Z., Davis, H., & Hamiti, E. (2023). Mental health, study skills, social support, and barriers to seeking psychological help among university students: a call for mental health support in higher education. *Frontiers in Public Health, 11*, 1220614. https://doi.org/10.3389/fpubh.2023.1220614
- Kilpatrick, J.R., Ehrlich, S., Bartlett, M. (2021). Learning from COVID-19: Universal Design for Learning Implementation Prior to and During a Pandemic. *The Journal of Applied Instructional Design*, 10(1). https://dx.doi.org/10.51869/101jkmb
- Kim, Y. & Olesova, L. (2022). Expanding Online Professional Learning in the Post-COVID Era: The Potential of the Universal Design for Learning Framework. *The Journal of Applied Instructional Design*, *11*(2). https://dx.doi.org/10.59668/377.8261
- King-Sears, M. E., Stefanidis, A., Evmenova, A. S., Rao, K., Mergen, R. L., Owen, L. S., & Strimel, M. M. (2023). Achievement of learners receiving UDL instruction: A meta-analysis. *Teaching and Teacher Education*, *122*, 103956. https://doi.org/10.1016/j.tate.2022.103956
- Kirwan, M., Bhatti, A.J., Pacey, V., Gray, K., & Dean, C.M. (2022). Overcoming Silos: A Sustainable and Innovative Approach to Curriculum Development. *Education Sciences*, 12(6), 375. https://doi.org/10.3390/educsci12060375
- Kourea, L., Christodoulidou, P., & Fella, A. (2021). Voices of undergraduate students with disabilities during the COVID-19 pandemic: A pilot study. *European Journal of Psychology Open*, 80(3), 111–124. https://doi.org/10.1024/2673-8627/a000011
- Lambert, R., McNiff, A., Schuck, R., Imm, K., & Zimmerman, S. (2023). "UDL is a way of thinking": theorizing UDL teacher knowledge, beliefs, and practices. *Frontiers in Education*, 8. https://www.frontiersin.org/articles/10.3389/feduc.2023.1145293
- Lawson, A., & Beckett, A.E. (2021). The social and human rights models of disability: towards a complementarity thesis. *The International Journal of Human Rights*, *25*(2), 348-379.

- DOI: 10.1080/13642987.2020.1783533
- Leitch, C. M., Hill, F. M., & Harrison, R. T. (2010). The Philosophy and Practice of Interpretivist Research in Entrepreneurship: Quality, Validation, and Trust. *Organizational Research Methods*, *13*(1), 67-84. https://doi.org/10.1177/1094428109339839
- Leow, T., Li, W. W., Miller, D. J., & McDermott, B. (2024). Prevalence of university non-continuation and mental health conditions, and effect of mental health conditions on non-continuation: a systematic review and meta-analysis. *Journal of Mental Health*, 1–16. https://doi.org/10.1080/09638237.2024.2332812
- Lewis, L., & Smith, R. (2023). Sociological perspectives on the mental health and wellbeing agenda in education. *Research Papers in Education*, *38*(5), 715-726. DOI: 10.1080/02671522.2023.2238360
- Li, Y.-F., Zhang, D., Dulas, H. M., & Whirley, M. L. (2023). The impact of COVID-19 and remote learning on education: Perspectives from university students with disabilities.

 Journal of Disability Policy Studies. https://doi.org/10.1177/10442073231185264
- Lin, W., Yin, H., & Liu, Z. (2022). The roles of transformational leadership and growth mindset in teacher professional development: The mediation of teacher self-efficacy. *Sustainability*, 14(11), 6489. https://doi.org/10.3390/su14116489
- Lisiecka, A., Chimicz, D., & Lewicka-Zelent, A. (2023). Mental Health Support in Higher Education during the COVID-19 Pandemic: A Case Study and Recommendations for Practice. *International Journal of Environmental Research and Public Health, 20*(6), 4969. https://doi.org/10.3390/ijerph20064969
- Long, A. (2023, July 12). Rejecting the Deficit Model in the Classroom. Bloomington: Center for Innovative Teaching & Learning, Indiana University.
 Available: https://blogs.iu.edu/citl/2023/07/12/rejecting-the-deficit-model/
- Mansoori, M. N., Gulnaz, & Khan, M. A. (2024). Evaluating the effectiveness of universal design principles in architecture design studio. *ShodhKosh: Journal of Visual and Performing Arts*, 4(2ECVPAMIAP), 151–160. https://doi.org/10.29121/shodhkosh.v4.i2ECVPAMIAP.2023.705
- Marom, L. (2023). Resistance, Performativity, and Fragmentation: The Relational Arena of EDI/D in Canadian Higher Education. *Canadian Journal of Education / Revue Canadienne de l'éducation, 46*(4), 1083–1114. https://doi.org/10.53967/cje-rce.6071
- Mcallister, A. (2020). Mental illnesses are not an 'ideal type' of disability for disability income support: Perceptions of policymakers in Australia and Canada. *Scandinavian Journal of*

- Public Health, 48(4), 452-459. doi:10.1177/1403494818816903
- Moghimi, E., Stephenson, C., Gutierrez, G., Jagayat, J., Layzell, G., Patel, C., McCart, A., Gibney, C., Langstaff, C., Ayonrinde, O., Khalid-Khan, S., Milev, R., Snelgrove-Clarke, E., Soares, C., Omrani, M., & Alavi, N. (2023). Mental health challenges, treatment experiences, and care needs of post-secondary students: a cross-sectional mixed-methods study. *BMC Public Health*, 23, 655. https://doi.org/10.1186/s12889-023-15452-x
- Morris, S. (2022, May 20). Bristol University found guilty of failings over death of student. *The Guardian*. Available: https://www.theguardian.com/education/2022/may/20/bristol-university-found-guilty-of-failings-over-death-of-student-natasha-abrahart
- Morris, D., & Targ, H. (2022). The Crisis of Higher Education: Neoliberalism and the Privileging of "Innovation" in The Twenty-First Century. *Critical Criminology, 30*, 527–540. https://doi.org/10.1007/s10612-022-09654-9
- McChesney, K. & Aldridge, J. (2019). Weaving an interpretivist stance throughout mixed methods research. *International Journal of Research & Method in Education, 42*(3), 225-238. DOI: 10.1080/1743727X.2019.1590811
- McCloud, T., Kamenov, S., Callender, C., Lewis, G., & Lewis, G. (2023). The association between higher education attendance and common mental health problems among young people in England: evidence from two population-based cohorts. *The Lancet, 8(10),* https://doi.org/10.1016/S2468-2667(23)00188-3
- Mueller, C.M., Richardson, J., Watson, S.L., & Watson, W. (2022). Instructional designers' perceptions & experiences of collaborative conflict with faculty. *TechTrends*, *66*, 578–589. https://doi.org/10.1007/s11528-022-00694-0
- Murphy, J.W., & Perez, F.M. (2002). A Postmodern Analysis of Disabilities. *Journal of Social Work in Disability & Rehabilitation*, 1(3), 61-72. DOI: 10.1300/J198v01n03_06
- Myri (2022, November 7). From teaching to UX design. *Medium*. Available: https://bootcamp.uxdesign.cc/from-teaching-to-ux-design-97cba219271b
- Olssen, M., & Peters, M.A. (2005). Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism. *Journal of Education Policy*, 20(3), 313-345. DOI: 10.1080/02680930500108718
- Open Access News (2023, July 14). How can universities support students' mental health? *Education News*. Availablle: https://www.openaccessgovernment.org/how-can-universities-support-students-mental-health/163772/
- Palma, C., Abdou, A.S., Danforth, S., & Griffiths, A.J. (2023). Are deficit perspectives thriving

- in trauma-Informed schools? A historical and anti-racist reflection. *Equity & Excellence in Education*, 1-17. DOI: 10.1080/10665684.2023.2192983
- Pan, C. C. S., & Thompson, K. (2009). Exploring dynamics between instructional designers and higher education faculty: An ethnographic case study. *Journal of Educational Technology Development and Exchange (JETDE)*, 2(1), 33-52. https://doi.org/10.18785/jetde.0201.03
- Peters, M. A. (2021). Neoliberalism as political discourse: The political arithmetic of homo oeconomicus. In M. Sardoč (ed.), *The Impacts of Neoliberal Discourse and Language in Education* (pp. 69-85). New York: Routledge.
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review, 16*(4), 385–407. https://doi.org/10.1007/s10648-004-0006-x
- Price, I., & Regehr, G. (2022). Barriers or costs? Understanding faculty resistance to instructional changes associated with curricular reform. *Canadian Medical Education Journal*, *13*(3), 113–115. https://doi.org/10.36834/cmej.74041
- Quirke, M., Mc Guckin, C., & McCarthy, P. (2023). *Adopting a UDL Attitude within Academia: Understanding and Practicing Inclusion Across Higher Education* (1st ed.).London:

 Routledge. https://doi.org/10.4324/9781003137672
- Rao, K., & Meo, G. (2016). Using Universal Design for Learning to Design Standards-Based Lessons. SAGE Open, 6(4). https://doi.org/10.1177/2158244016680688
- Rao, K., Smith, S. J., Edyburn, D., Grima-Farrell, C., Van Horn, G., & Yalom-Chamowitz, S. (2018). *UDL Reporting Criteria*. Developed by a working group of the Universal Design for Learning implementation and research (UDL-IRN) research committee.

 Available: https://udl-irn.org/udl-reporting-criteria/
- Reyes, H. L., & Duran, A. (2024). A narrative study examining Latina collegians' maternal relationships and their influence on educational trajectories. *Journal of Latinos and Education*, 23(1), 149–162. https://doi.org/10.1080/15348431.2022.2114907
- Riboldi, I., Capogrosso, C. A., Piacenti, S., Calabrese, A., Lucini Paioni, S., Bartoli, F., Crocamo, C., Carrà, G., Armes, J., & Taylor, C. (2023). Mental Health and COVID-19 in University Students: Findings from a Qualitative, Comparative Study in Italy and the UK. *International Journal of Environmental Research and Public Health*, 20(5), 4071. https://doi.org/10.3390/ijerph20054071
- Ribosa, J., Corcelles-Seuba, M., Morodo, A., & Duran, D. (2024). Reducing teachers'

- resistance to reciprocal peer observation. *European Journal of Education, 59*, e12606. https://doi.org/10.1111/ejed.12606
- Rutkowska, A., Cieślik, B., Tomaszczyk, A., & Szczepańska-Gieracha, J. (2022). Mental health conditions among E-Learning students during the COVID-19 pandemic. *Frontiers in Public Health, 10.* https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2022.871934
- Sahagun, M.A., Moser, R., Shomaker, J., & Fortier, J. (2021). Developing a growth-mindset pedagogy for higher education and testing its efficacy. *Social Sciences & Humanities Open, 4*(1). https://doi.org/10.1016/j.ssaho.2021.100168
- Sakız, H., & Jencius, M. (2024). Inclusive mental health support for international students: Unveiling delivery components in higher education. *Cambridge Prisms: Global Mental Health, 11*, e8. doi:10.1017/gmh.2024.1
- Schell, J. (n.d.). *Design Thinking Has a Pedagogy Problem... And a Way Forward.* Austin: University of Texas. Available: https://designcreativetech.utexas.edu/design-thinking-has-pedagogy-problem-way-forward
- Smith, D., & McLellan, R. (2023). Mental health problems in first-generation university students: A scoping review. *Review of Education, 11*, e3418. https://doi.org/10.1002/rev3.3418
- Takacs, S. (2021, June 4). *Mental Health and UDL. Pedagogy + Practice*. Kwantlen Polytechnic University, Teaching and Learning Commons.

 Available:https://wordpress.kpu.ca/tlcommons/mental-health-and-udl/
- Tate, E. (2017, May 3). Easing instructional designer-faculty conflicts. *Inside Higher Ed.*Available: https://www.insidehighered.com/digital-learning/article/2017/05/03/easing-conflicts-between-instructional-designers-and-faculty
- Treleaven, S. (2022, November 14). Inside the mental health crisis at Canadian universities.

 *Maclean's. Available: https://education.macleans.ca/feature/inside-the-mental-health-crisis-at-canadian-universities/
- Trigwell, K., Caballero Rodriguez, K., & Han, F. (2012). Assessing the impact of a university teaching development programme. *Assessment & Evaluation in Higher Education, 37*(4). https://doi.org/10.1080/02602938.2010.547929
- Van Eekert, N., De Bruyn, S., Wouters, E., & Van de Velde, S. (2023). Understanding Mental Wellbeing amongst Potentially Vulnerable Higher Education Students during the COVID-19 Pandemic. Social Sciences, 12(5), 282. https://doi.org/10.3390/socsci12050282

- Wagner, B., Snoubar, Y., & Mahdi, Y.S. (2023) Access and efficacy of university mental health services during the COVID-19 pandemic. *Frontiers in Public Health, 11.* Available: https://www.frontiersin.org/articles/10.3389/fpubh.2023.1269010
- Wertz, F. J. (2023). Phenomenological methodology, methods, and procedures for research in psychology. In H. Cooper, M. N. Coutanche, L. M. McMullen, A. T. Panter, D. Rindskopf, & K. J. Sher (eds.). APA Handbook of Research Methods in Psychology: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological (2nd ed., pp. 83–105).
 PlaceAmerican Psychological Association. https://doi.org/10.1037/0000319-005
- Williams, E. (2018). Resisting the Drive to Theorise: A Phenomenological Perspective on Social Science Research. *Magis. Revista Internacional de Investigación en Educación,* 11(22), 43-56. DOI: https://doi.org/10.11144/Javeriana.m11-22.rdtp
- Zallio, M., & Clarkson, P. J. (2023). A study to depict challenges and opportunities building industry professionals face when designing inclusive and accessible buildings.
 Architectural Science Review, 67(3), 268–279.
 https://doi.org/10.1080/00038628.2023.2270983
- Zaza, C., & Yeung, R. C. (2023). It's time to bring mental health literacy education into the postsecondary curriculum. *The Canadian Journal for the Scholarship of Teaching and Learning*, *14*(1). https://doi.org/10.5206/cjsotlrcacea.2023.1.13663