A Social Work Lens for a Disaster-informed Curriculum

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ABSTRACT

This paper presents a rationale for the inclusion of disaster knowledge within the social work curriculum and argues for a broad, population-based structuring of knowledge-for-disaster within the generic curriculum. An exploration of the social work knowledge base is conducted which argues that the strengths and recovery focus inherent within our research, teaching and practice provides social work with a working mandate for working in disasters. Some key principles for curriculum design are established and a model curriculum is presented.

Keywords: *Social work education; Disaster; Curriculum*

THE RATIONALE FOR DISASTER-INFORMED CURRICULA IN SOCIAL WORK EDUCATION

The Canterbury earthquakes in the South Island of New Zealand in 2010–11, and the subsequent recovery and re-construction activities exacerbated by secondary stressors such as housing repairs and shortages, income disruption, liquefaction, pot-holed roads, attempts to settle insurance claims, and community re-locations, have served to remind the region of our vulnerability to natural hazards and the potential for large-scale disaster. Recent events in Australia and the Pacific (bushfires, floods, volcanic eruption and tsunami) have heightened awareness of weather-related events and seismic activity, as well as the effects that human settlement, agricultural and industrial behaviour are having on climate change and the environment. Realisation that global pandemics such as Ebola and "bird flu" are only a flight away from our shores, and that geographically distant wars have global impact, underscore this vulnerability. Disasters cannot be construed as events that happen to other peoples for which international aid is perhaps our first and only possible response. As the new global definition of social work, ratified in Melbourne in July 2014, states: "social work engages people and structures to address life challenges and enhance wellbeing" (International Federation of Social Workers [IFSW], 2014). Here we have a mandate to prepare for, and respond to, disaster. Research and practice evidence that social work has made a major global contribution in the response to disasters adds weight to the inclusion of preparation for disaster practice within the social work and welfare curriculum (for example, Bliss and Meehan (2008) in relation to Hurricane Katrina; Corin (2011) and Maher and Maidment (2013) in connection with the Canterbury earthquakes; Rowlands (2013a) in terms of the Australian bushfire experience; Rowlands and Tan (2008) relating to the Boxing Day/Indian Ocean tsunami; and Yanay and Benjamin (2005) dealing with war and terrorism).

Social work and welfare education programmes, established in Australasia primarily to educate a domestic workforce of social work and human service personnel, therefore have an imperative to establish a relationship with disaster response in our own contexts, and to develop curriculum that best prepares graduates for working in the aftermath of disaster (ANZASW/DHB Social Work Leaders Council, 2009). However, Rowlands (2007; 2013b) observes that there is generally a lack of social work curriculum on disasters, despite the frequency with which communities are faced with both human-induced and natural disasters. Similarly, Healy (2007) argues that disasters are typically under-considered in the social work curriculum whilst requiring social work involvement when disaster occurs. Rock and Corbin (2007) suggest that there has been little attention to social work and disaster management education in their home region of the Caribbean, despite social workers being mandated to help in disaster response: they recommend a disaster management component within all degrees. A "snap poll" conducted by the author of social work programmes within Aotearoa New Zealand indicated a low level of engagement with disaster content within the generic social work curriculum, with only two of the Schools of Social Work that responded indicating any curriculum specifically addressing the subject. Given the disparity between the importance of disaster awareness, knowledge and skills, and the level of actual curriculum delivery on the subject, this paper scopes the means by which the curriculum

can become disaster-informed and discusses the relationship between existing knowledge bases and the introduction of disaster material within the curriculum.

DEFINING DISASTER

Three elements of the definition of disaster are addressed here as a basis for the consideration of the knowledge base for disaster-informed curriculum. The magnitude and impact of disaster is discussed as a means of distinguishing our understanding of a disaster from that of other major events. Subsequently, the origins of the event(s) – from the natural world that impact on human experience (such as an earthquake), from human activity (such as terrorism or toxic exposure) or from an interaction between the two (such as landslides resulting from agricultural practice) – are explored. The dimension of time – whether a disaster is of slow or rapid onset – is considered as a variable in the relationship between environmental events and human experience.

The act of defining disaster has elements of the self-evident (with characteristics of scale, potential disruption to, and destruction of, everyday life) that sometimes skirt the need for closer scrutiny and delineation. However, without some analysis, the notion of disaster can lose focus and risk capture by different perspectives, as do the definitions of stress, crisis, trauma and resilience: all concepts which have emerged during times of scientific and medical model dominance but which are now employed within systemic and constructivist frames of reference. Compare, for instance, an early definition of disaster as "an event which takes more than 10,000 lives" (cited in Emergency Management Australia [EMA], 2004, p. 1) to the argument put forward by the United Nations Office for Disaster Risk Reduction:

A disaster's severity depends on how much impact a hazard has on society and the environment. The scale of the impact in turn depends on the choices we make for our lives and for our environment. These choices relate to how we grow our food, where and how we build our homes, what kind of government we have, how our financial system works and even what we teach in schools. Each decision and action makes us more vulnerable to disasters – or more resilient to them. United Nations International Strategy for Disaster Reduction (UNISDR) (2007, n.p.)

This definition underscores the complex, dynamic relationship between available individual and collective strengths and vulnerability and the power of a hazard or an event (or series of events) to overwhelm existing resources and coping strategies, a dynamic captured by the formula in Figure 1 (below).

Figure 1. Defining Disaster

$$\text{Impact} = \frac{\text{hazard x vulnerability}}{\text{exposure}}$$

Such a qualitative definition creates space for the impact of extreme large-scale hazards and events to be determined by the relationship between resources, coping and exposure, rather than by single quantitative measures of scale or loss (see, for example, Finch, Emrich, and Cutter's 2010 discussion of these variables in the context of Hurricane Katrina). This is

compatible with current social work perspectives that suggest "the profession's fundamental understanding of the integrated nature of the material, the social, the cultural, and the intrapsychic" (Bragin, 2011, p. 377). Social work is one of the few professional perspectives that actively link knowledge about individual and group functioning with social and political understanding. Our knowledge base – it is perhaps more accurate to follow Payne's (2001) suggestion and refer to our theoretical and practice perspectives as a knowledge *bias* – is shaped by our systems origins and the on-going development of our perspective through the influence of cultural and indigenous, constructivist and, increasingly, deep ecological/sustainability thinking. It is characterised by relational and contextually aware understanding of how we experience the world and how the world influences us. Such bio-psycho-social approaches, informed by structural awareness and the ecological context of events, are the territory of social work knowledge for disaster curriculum that is addressed within this paper.

As a second dimension of our understanding of disaster, the types of disaster for which a social work curriculum may prepare students and practitioners will likely be influenced by the relative exposure to disaster events within the region in which the education occurs. Experience of disasters within the Australasian-Pacific region may lead to disaster definition as being more frequently that of natural disasters (for example, earthquake, bushfire, tsunami, and volcanic eruption) rather than the less frequently occurring acts of terrorism and human-induced outrage such as the Bali bombings in 2002 and 2005 and the potential for global conflicts (such as the current Islamic State power struggle in Iraq and Syria, and the Israeli–Palestinian tensions) to reach our shores. The International Federation of Red Cross and Red Crescent Societies (IFRC) categorises hazards as geophysical, hydrological, climatological or biological as distinct from technological and "man-made" hazards (IFRC, 2014). Whilst the origin of events may well determine the characteristics of the physical impact, options for intervention and mitigation of future events, for the purposes of this paper, an interactive model such as proposed in Figure 1 is adopted here, so that a disaster is not described as "natural", for example, so much as being a result of a natural hazard that has had major impact both on human experience and on the natural world in which we live. Hazards (the origins of risk) can therefore come from the natural world or from human activity; so too, the levels of vulnerability and exposure are determined and potentially aggravated by the interaction of people and their environment: the notion that vulnerable and marginalised groups become more vulnerable in the aftermath of disaster contributes to the knowledge base developed within this paper.

The third element in our conceptualisation of disaster is that of the relationship between disasters and time, with some disasters classified as "rapid-onset" (earthquakes strike suddenly) and others as "slow-onset" (such as the risk to island communities in the Pacific through rising sea levels produced by climate change) (Cutter et al., 2008). In terms of our understanding of the impact of disasters as a complex interrelationship between human actions and physical conditions, slow or anticipated disasters clearly have more opportunity for direct human engagement in the preparation or ignoring of response. However, in rapid disasters such as earthquakes, seismic modelling and prior history can also provide opportunity for human intervention in preparing for the unpredictable. The length of time between identification of a hazard and its onset provides opportunity for human activity

to mitigate or exacerbate its eventual impact, and more opportunity for the development of curricula that will prepare social workers to work in this interactive space. Healy (2007) argues that the international education and practice definition of social work having "developmental, protective, preventive and/or therapeutic purposes" (IASSW/IFSW, 2004, p. 3) provides the mandate for social work education to prepare students for all stages of a disaster, from disaster prevention and mitigation, intervention at the point of immediate need and to engage in recovery processes with individuals and with communities over subsequent spans of time. Discussion now turns to how we frame up and deliver such knowledge within the curriculum.

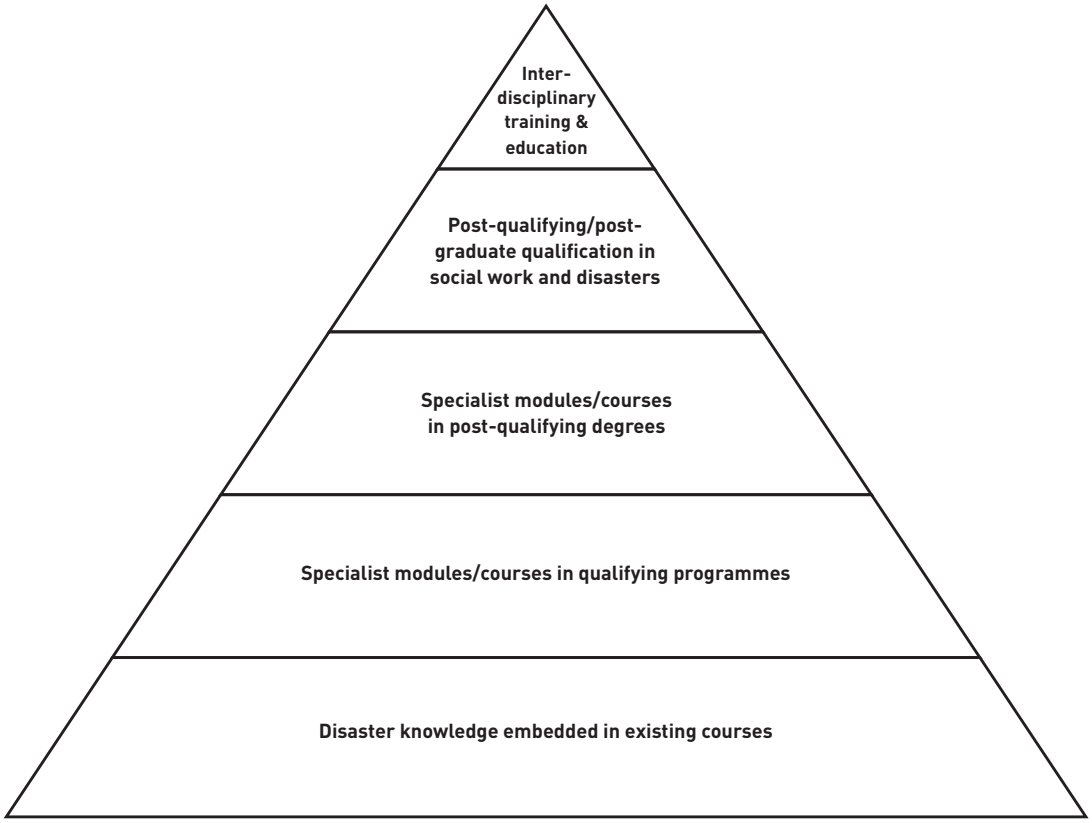
SITING DISASTER CURRICULUM IN SOCIAL WORK AND WELFARE EDUCATION

The rationale for curriculum development and inclusion of disaster-informed knowledge within the social work and welfare curriculum has been presented. The challenge now becomes one of structure (where, to whom, and in what form a disaster curriculum is delivered) and of content and process (the knowledge and perspectives with which any disaster-informed curriculum engages).

The structural location of disaster-informed curriculum within social work education may be determined by external factors beyond any imperative for its inclusion. Some institutions may solely deliver under-graduate qualifying programmes without opportunity to engage in post-qualifying/post-graduate study while others may offer a range of inter-disciplinary post-graduate programmes, both taught and research-based. Social work education is acknowledged as a complex and contested environment (Burgess, 2004) with multiple claims regarding the importance of particular knowledge bases, fields of practice and modalities for service delivery, into which disaster-informed knowledge becomes but one of the competing elements. How then do we enable programmes and courses to include disaster awareness, knowledge and skills? A population-based argument is mounted here, as illustrated in Figure 2 (below).

Within this model, the delivery options for disaster-informed curriculum can be represented (at the top of this pyramid) by specific programmes and qualifications, perhaps inter-disciplinary in nature and delivered at post-graduate or post-qualifying levels to self-selecting students with prior interest in disaster-informed working. As an alternative, a broad population-based approach (represented by the breadth of the base of the pyramid) addresses the needs of all social work and welfare students, by the insertion of disaster-informed knowledge within existing courses, located most likely within qualifying programmes of generic social work or human services education.

Figure 2. Delivery Options For Disaster-Informed Curriculum



On such a continuum of delivery, each position has both advantage and disadvantage. Experience suggests that social work response to disasters is: neither unique nor discrete in practice, but executed in conjunction with other disciplines and initiatives; inter-disciplinary in nature; with new roles and actions determined by the demands of the situation (Corin, 2011); and requiring collaboration with other community stakeholders (Tudor, 2013). Specialist inter-disciplinary education raises awareness of social work's role within disasters through education alongside emergency responders, civil defence organisers, and health practitioners and community leaders, as disaster response is characterised by inter-disciplinary collaboration and the professional–voluntary interface. Specific disaster-focused programmes and courses also carry the advantage of depth: specialist knowledge and practice can be developed without the competiveness produced by a crowded generic curriculum or regulatory demands that require adherence to prescribed content.

In juxtaposition with specialist programmes, a primary or population-based strategy for curriculum delivery would suggest that, given the unpredictability but inevitability of disasters and major crises in the lives of the communities in which we practise, there is an imperative for the delivery of disaster knowledge to be provided to as wide a population as possible within social work and welfare education to raise awareness and provide perspectives and knowledge that may make a difference in our capacity to respond. A population-based, disaster-informed curriculum does not preclude, but rather underpins, the development of specialised educational programmes and as a primary strategy, is compatible with social work's commitment to prevention of harm, early intervention and to empowerment of the workforce to meet the social justice and human rights imperatives that arise when

communities are hit by a disaster: it is this approach which is further developed within this paper.

Embedding disaster knowledge within a generic curriculum creates both challenge and opportunity in curriculum design. Instead of a clear focal point of disaster knowledge as would occur in a discrete course or separate programme, the emphasis moves from knowledge-of-disaster to knowledge-for-disaster, as disaster content embedded in an extant curriculum will be in intimate juxtaposition with pre-existing content. This provides an opportunity for integration with a broader social work knowledge base and an enhanced appreciation of the many ways in which disasters can impact upon human experience and our environment.

SOCIAL WORK KNOWLEDGE AND THE FRAMING OF DISASTER

The nature of social work knowledge is well established as a dynamic, iterative process achieved through the interaction of values, skills and theory within the context of practice. Healy (2005), for example, suggests that there is neither a common and specific set of knowledge nor an institutional base such as other disciplines manifest, but rather that social work knowledge is an interplay of contributory factors responsive to context. Nevertheless, as the changes in the IFSW (2014) definition suggest, social work can be recognised as an academic discipline and has available to it, therefore, a body (or range of bodies) of knowledge. Many introductory texts address the span of paradigms, discourses and theoretical positions that characterise social work (for instance, Chenoweth & McAuliffe, 2015; Nash, Munford, & O'Donoghue, 2005) and others present contextualised knowledge for practice from within a critical and politically informed stance that binds practice in diverse fields and modalities to social work's core principles of human rights, social justice and social change (Allan, Briskman, & Pease, 2009; Jones, Cooper, & Ferguson, 2008). Payne's (2001) positioning of our discipline's uniqueness as a knowledge *bias* suggests that, in addition to the distinct knowledge bases such as crisis, community development and ecosystems theory upon which we can draw, social work construction of knowledge-for-disaster can be characterised by the approaches that govern *how* we apply the knowledge; by the contextually aware ability to manage environment and interaction; and by the values-based comprehension of issues of power, structure and macro-level influences. Such a shift in emphasis from "figure" to "ground" is perhaps a key characteristic of social work as an emergent profession and discipline in a post-modern world and provides the opportunity to consider the contribution of diverse knowledge bases within the uniquely organised matrix that is the social work curriculum. Discussion of some key principles that emerge in the relationship between our available knowledge bases and knowledge-for-disaster now follows.

A primary principle emerging from the literature suggests that social work takes a well-developed stance in relationship to the values that link knowledge bases together. As a profession born during the dominance of psychodynamic and scientific perspectives but shaped by and now practising within contexts that recognise diversity, indigeneity and the construction of knowledge, we are in an advantageous position in terms of our ability to be effective in disaster response. Gray and Gibbons (2002) argue that students on social

work courses need to have a balance between strengths approaches and critical social work. With a focus on disaster response, Rowlands (2007; 2013b) similarly argues that there needs to be a clear use of a strengths-based perspective and a framework of human rights. Implicit in this is the recognition of people's resilience and ability to recover without formal mental health intervention. A clear principle for curriculum design is therefore the linking of the personal (the skills of how we work with people) and the political (the reasons why we do so), and the combined application of both constructivist and structural approaches, so that we work with people using their own expertise and narratives without losing sight of injustice, marginalisation and oppression, factors that can be exacerbated in the impact of, and recovery from, disaster.

Such a bi- or multi-focal perspective can also be applied to the core knowledge to understand the impact of disaster, commonly constructed as knowledge in regard to crisis, stress and trauma. Figure 3 (below) presents an overview of the evolution of the knowledge bases that are universally applied to disaster situations in relation to the potential impact as a result of exposure to severe hazard and adversity. The Figure suggests that some key knowledge bases have ideological and philosophical roots embedded in scientific perspectives which, to varying degrees, continue to shape both their interpretation of human experience and our responses to disaster. Knowledge bases that have evolved more recently have more of a foothold in systems and constructivist perspectives, and more latterly in Aotearoa New Zealand and in Australia, have acknowledged and begun to incorporate understandings of reality from indigenous and non-Western perspectives.

Figure 3: A sea-change of ideas from trauma to resilience and strengths

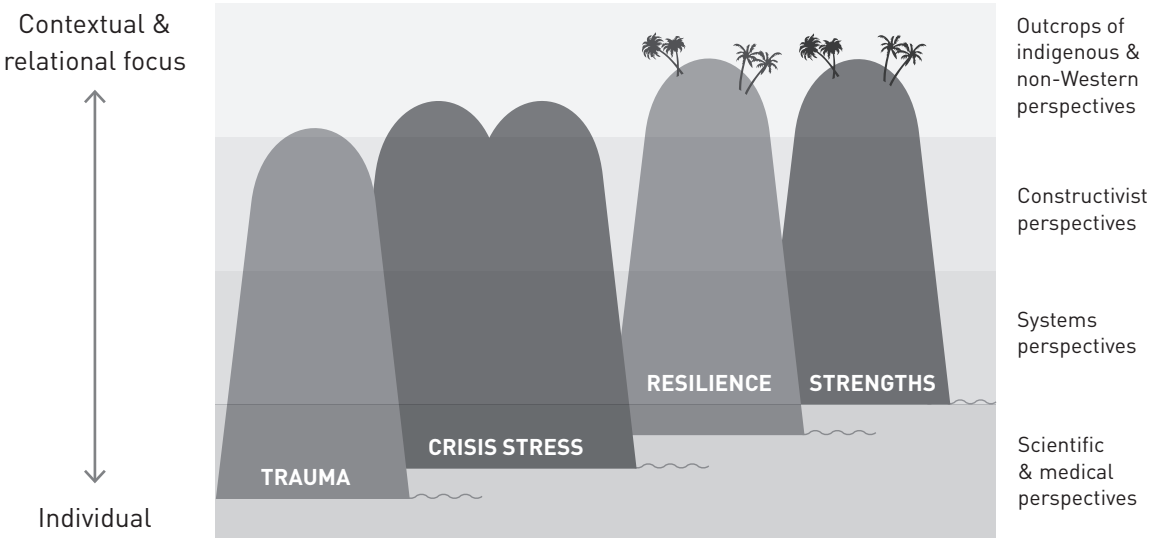


Figure 3 suggests we recognise that, in drawing upon certain knowledge bases within disasters, we may construct the disaster experience and response in different ways. Rowlands (2007) argues that students need to have knowledge of trauma and other psychological and medical perspectives but that attention needs to be paid to the more recent movements within these disciplines that pay attention to psychosocial recovery and focus less on psychopathology. Traumatic reactions may be perceived as common in disaster settings, with compromise and damage to physiological, emotional, cognitive and social coping responses. However,

trauma knowledge bases have their origins within medical frames of reference, and much current research and intervention remain focused upon neurological and cognitive process that privileges a focus on support for the individual and an under-emphasis on collective and community recovery. As Rowlands (2007) points out, there is actually a relatively low rate of serious mental health and trauma responses in the aftermath of a disaster.

The challenge for trauma knowledge to adapt to systems and constructivist perspectives became one of the focal points of the debate over critical incident stress debriefing, for instance (for example, Adamson, 2014; Pack, 2012). Crisis intervention theories, too, have evolved along with the sea-change in ideas, so current emphasis is on contextual influences and possibilities of recovery rather than merely individual impact and pathology. Myer and Moore (2006) present a crisis-in-context theory that is grounded in an ecological perspective rather than the early location of crisis theory within scientific perspectives. They suggest that, with a focus on crisis, that there is a need for dual attention both on the impacted individuals and the wider system in which they function. Their model of crisis also suggests that its impact will change with ongoing appraisal and new environmental influences, suggesting the possibility of constructivist and narrative influences on the understanding of crisis. From current stress literature, too, come important re-constructions of the initial conceptualisations of stress, so that work by Thoits (2010) and McEwen and Gianaros (2010) describe bi-directional influences on the stress experience: brain influences body and social conditions, but social conditions also have an impact on brain and body, thus legitimising social-level interventions such as social work as well as underlining the importance of multi-level interventions when disaster strikes.

The concept of resilience provides opportunity for social work knowledge-for-disasters to demonstrate theoretical and practical relevance and versatility. As a concept achieving prominence within systems and constructivist thinking, it has rapidly moved beyond its early constructions of resilience as purely an individual trait to one that incorporates appreciation of cultural diversity and the importance of narrative (Adamson, 2013; Bonanno, 2004; Bottrell, 2009; Ungar, 2004). Whilst a contested and debated definition in disaster response, the notion of community resilience is now established in policy and disaster practice (for instance, Thornley, Ball, Signal, Lawson-Te Aho, & Rawson, 2014). The evolution of resilience as a conceptual framing of multi-level complex reactions and responses to disaster offers social work curricula (with person-in-environment, relational, structural and strengths perspectives) a strong mandate and conceptual basis for teaching and learning.

Having described social work's framing of disaster knowledge as both bi-focal and bi-directional, the third key principle that emerges from the literature is that social work is a profession and an academic discipline with a strong value base in human rights, social justice and an emphasis on intervention for social change. When considering our relationship with the natural world and the risk of disaster, such a stance will also include issues of environmental sustainability and ecology. Besthorn (2013) argues for social work to take a deep ecological stance that extends our traditional person-in-environment to an ecological position that recognises that we are intrinsically linked to, and dependent upon, the natural world. He identifies social work's commitment to social justice as a

necessary but not sufficient imperative in the face of ecological threats. Affirming that "all justice is ecological" (p. 31), he suggests that many social work conceptualisations of social justice (including the concept of environmental social work) are anthropocentric and that our traditional "person-in-environment" perspective retains an inbuilt bias towards the social and built environments. Such challenges require any consideration of disaster within the social work curriculum to relate to our knowledge concerning community development (Dominelli, 2013); indigenous and non-indigenous identity and connection to place (Lambert, 2014; Zapf, 2009); sustainability (Poland & Dooris, 2010); human rights and forced migration (Mutch & Marlowe, 2013); and concepts of social inclusion, marginalisation and equity (Zhao, 2007). Knowledge of the impact of disasters on those already socially and economically vulnerable provides an added dimension to the curriculum's existing emphasis and commitment to social policy, community development and empowerment strategies.

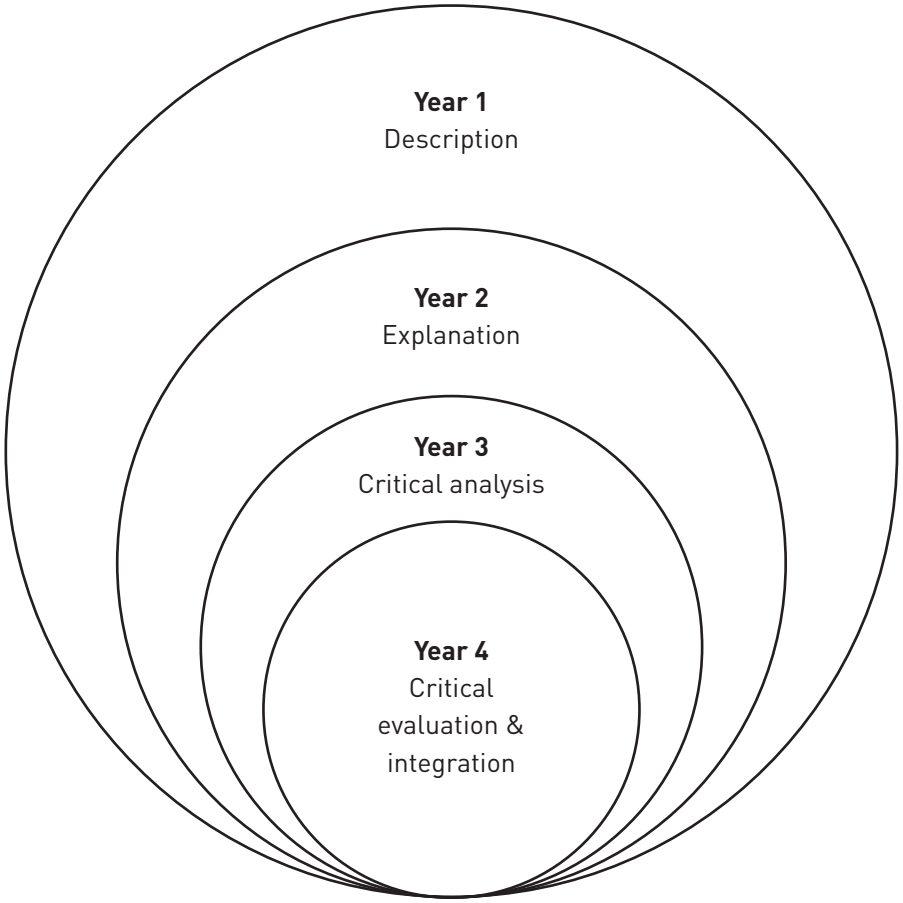
This paper therefore argues that knowledge-for-disaster within the social work curriculum has some natural synergies with how we construct the values, knowledge and skills of social work: our current emphasis on both strengths approaches and structural analysis, an implicit recognition of complexity and eco-systems functioning, and a commitment to resilience moves within social justice and human rights-informed activity provide a platform upon which a disaster-informed curriculum can be constructed. The paper concludes with a brief discussion on the practicalities of embedding disaster knowledge within the curriculum.

EMBEDDING WITHOUT BURYING: THE INCLUSION OF DISASTER KNOWLEDGE WITHIN THE SOCIAL WORK CURRICULUM

Taking a population-based approach to the inclusion of knowledge-for-disaster within the social work curriculum, the key challenge that emerges becomes one of the relationships between disaster knowledge and the other ingredients of a generic, social work educational programme. Distinct islands of disaster curriculum may be less apparent than disaster-related themes or topics within other key knowledge bases. Some suggestions for curriculum inclusion and audit now follow.

The model of curriculum used in this discussion is that of a four-year undergraduate programme. This is used in recognition that all social work undergraduate programmes in Australia are of four-year duration, alongside some New Zealand programmes, with some currently in transition between three and four years (all New Zealand undergraduate qualifications will be four years in length from 2017).

Figure 4. Characteristics Of Year Stages In A Four-Year Degree



The design of a four-year curriculum follows particular scaffolding principles characteristic of Bloom's educational taxonomy (see Krathwohl, 2002). As Figure 4 (above) illustrates, each year of a degree develops enhanced depth and sophistication, with students moving from a starting point of description, through explanatory and analytical approaches, to a beginning-practitioner level which seeks to integrate knowledge, values and skills gained from academic and practice-based learning.

With such a developmental model of growth, it follows that knowledge-for-disaster within the generic curriculum can also be shaped and staged according to expectations of student development. Using a "figure and ground" understanding that disaster knowledge may at times be honoured by distinct modules, but also by insertion within other focal points, the key principles developed in this paper can be applied to a model curriculum (Figure 5, below). Within this model, four exemplar themes (social work theory and values; practice and skills; social policy and community development; culture and diversity/fields of practice) that may occur within a social work curriculum have a disaster-informed awareness inserted over their four-year span.

Figure 5. Knowledge-For-Disaster In A Model Curriculum

	Year 1: Description	Year 2: Explanation	Year 3: Critical analysis	Year 4: Integration
Social work theory & values	Human development	Concept of trauma, stress and resillience	Ethical research with vulnerable populations	Best practive in disaster social work
Practice & skills	Self awareness & self-care	Group work and inter-agency communication	Crisis intervention/ psychological first aid	Stress management in crisis: reflective journal whilst on placement
Social policy & community	Inclusive & marginalisation	Assignment on how disasters can magnify social vulnerablity	Learn from indigenous elders about the impact of colonisation	Development of a disaster plan for agency of placement
Culture & diversity/ Fields of practice	Indigenous and non-indigenous philosophies	Mental health and recovery perspectives	The relationship between domestic violence & disasters	Indigenous models of disaster response

"Theory and values", of course, are themselves embedded within all teaching and learning processes, but are often given curriculum prominence: in a human development course, for example, a disaster-informed case study of a young child in Christchurch, 12 months old at the time of the first earthquake, will have spent over half their life (and the most formative months of their cognitive and emotional development) within an earthquake-dominated environment of risk, hazard and unpredictability. Such a small case study can serve the twin purposes of highlighting formative developmental periods in childhood as well as raising awareness of the longitudinal impact of disasters (Shirlaw, 2014). Following this theme, key theory in regard to trauma, stress and resilience may be taught in year two, linking brain to behaviour and disadvantage in line with the bi-focal and bi-directional principles outlined in this paper. The following year's emphasis on critical analysis may see disaster issues raised in a research paper through a focus on the ethics of research with vulnerable populations (Browne & Peek, 2014; Marlowe, Lou, Osman, & Alam, 2014). Year four may offer the chance of the insertion of a module or distinct paper on disaster intervention for social work.

A similar, incremental curriculum development in practice and skills can be charted. Year one can reinforce the research literature's emphasis on the importance of self-awareness and self-care when working under pressure in a disaster arena (van Heugten, 2013). Group work and inter-agency communication skills can build upon this, with skills in psychological first aid (Vernberg et al., 2008) and the all-important integration of one's own critical reflection of working in crisis being developed as the student becomes practice competent.

The inclusion of a disaster focus within social policy, law and community development (the "big picture" themes) enables students to see disaster as not only an individual crisis but an opportunity for macro-level intervention. Concepts of marginalisation and inclusion can be provided with disaster examples as diverse as the needs of older people (Gutman & Yon, 2014), the deaf community (Neuhauser et al., 2013) or of people with companion animals (Evans & Perez-y-Perez, 2013). Teaching and learning modes can vary from case studies (particularly appropriate for first-year classes where the personalisation of examples can assist in understanding marginalisation) to conversations with local Indigenous elders who can talk about how government policies have impacted on social and health inequalities. Such a focus on critical analysis in Year three enables students to link colonisation, "post-colonial" social development and values of human rights and social justice. The practical application of this knowledge could manifest in a final-year placement in the development of a disaster plan for an agency in the community.

Themes containing content related to culture and diversity, or the fields of practice in which social work is conducted, can be developed with disaster content. An emphasis on both narrative and structural understandings of disasters can inform introductory discussions about Indigenous and "Western/Northern" philosophies and processes. Models such as "Te Whare Tapa Wha" (Durie, 1998), already embedded in New Zealand social work curricula, attest to a holistic understanding of wellbeing and recovery which can easily incorporate consideration of disaster preparation and response that support learning about resilience gained elsewhere in the curriculum. Fields of practice as diverse as child protection, domestic violence, mental health, and drug and alcohol abuse can use case studies or focused assignments that integrate knowledge of stressors within disaster events and the manifestation of social problems.

Such a brief overview of a model curriculum can only begin to suggest the delivery options and assessment design that can creatively be employed to bring disaster knowledge to the forefront of a generic social work curriculum. Using the breadth of knowledge that is already contained within a social work curriculum is, however, an effective means of ensuring that disasters can achieve some prominence in student learning, as the process of embedding can reduce the demands on curriculum re-design and can serve well the purpose of a population-based approach to the integration of disaster-informed knowledge.

KNOWLEDGE-FOR-DISASTER IN THE SOCIAL WORK CURRICULUM

This paper has presented a rationale for the inclusion of disaster-informed knowledge within the social work curriculum and has developed principles that can inform a population-based delivery of knowledge-for-disasters to social work students. By so doing, it is argued that future social and welfare workers can be best equipped to plan for, and respond to, the disasters that may impact upon the communities in which we work.

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