Queer pedagogy for, with and within education for sustainable development

Dr Kieran Higgins Gibson Institute for Land, Food & Environment School of Biological Sciences Queen's University Belfast

LGBT+ Liberation: LGBT+ lives and issues in the context of normativities UCU Conference, November 2021

Summary

Education for Sustainable Development (ESD) is a growing movement that seeks to empower learners to face the existential threats of the Anthropocene. Queer pedagogy, as a form of critical pedagogy, rejects the influence of heteronormative and patriarchal systems and consequently also rejects anthropocentrism. To effectively educate for sustainable development, it becomes apparent that one must also educate in a queer-informed way. Despite this, there has been little scholarly work to date on where queer pedagogy fits within ESD. The purpose of this paper is to explore the link between the two seemingly related fields, but also provide a gateway for educational practitioners who come from the current paradigm within ESD to incorporate queer pedagogy, or for queer pedagogues to further a queered version of sustainable development, with a particular focus on higher education.

Introduction

The United Nations adopted the 17 Sustainable Development Goals (SDGs) in 2015, designed to guide humanity towards a more measured and equitable environment, society, and economy (Biermann et al., 2017). The essential role of education in delivering on these goals has been clearly recognised through the conceptualisation of Education for Sustainable Development (ESD) (Rieckmann, 2018a), defined as "educational programs, curricula, and teaching and learning practices that enhance student values, understanding, and capabilities" for sustainable development (Hallinger & Nguyen, 2020, p.3). ESD is placed within a competency-based educational framework whereby the focus is not so much on knowledge, but on the ability to demonstrate the skills of the "real-world professional" (Hodge et al., 2020). The most commonly used competencies in defining ESD are normative, systems-thinking, future-thinking, strategic, collaboration, problem-solving (Wiek et al. 2016), self-awareness and critical thinking (Rieckmann, 2018b).

In the existence of a need for ESD, there is a clear argument that education is not neutral: it can promote, ignore, or even detract from sustainable development. This concept of non-neutrality is fundamental to critical pedagogy, which examines how education promotes certain, often harmful, viewpoints and furthers the particular construction of our society (Giroux, 2020). Such viewpoints can include heteronormativity, which is defined as the positioning of cisgender heterosexuality as the societal default or even ideal (Nguyen, 2021). Heteronormativity also promotes patriarchal ideals of giving adult males advantage and control over women, girls, and young men in the public and private spheres (Benstead, 2021). Therefore, queer pedagogy is concerned with how heteronormativity and patriarchal ideals transfer into how we are educated, for good or for ill (Pennell, 2020).

Unsustainable development i.e., development that is economically, socially, and environmentally damaging, can be said to be heteronormative and patriarchal and thus anthropocentric as a result (Dalal et al., 2019). Queer pedagogy actively seeks to reject the influence of heteronormative and patriarchal systems in perpetuating harm to future generations, and therefore can be regarded as rejecting anthropocentrism as a consequence. To effectively educate for sustainable development, it becomes apparent that one must also educate in a queer-informed way. Despite this, there has been little scholarly work to date on where queer pedagogy fits within ESD. The purpose of this paper is to explore the link between the two seemingly related fields, but also provide a gateway for educational practitioners who come from the current paradigm within ESD to incorporate queer pedagogy, or for queer pedagogues to further a queered version of sustainable development. Thus, the paper is divided into eight sections to queer those relevant competencies of ESD. It is focused on higher education but many of the contributions can be adapted for use in primary, secondary and further education.

Queering norms

Normative competence refers to "the ability to understand and reflect on the norms and values that underlie one's actions and to negotiate sustainability values, principles, goals and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge and contradictions" (Rieckmann, 2018b, p.44). Queer pedagogy interrogates what it means to be normal and follow the expectations of our identities imposed by society (Shelton, 2021). The heteronormative drive to dominate certainly evolved concurrently with problems such as environmental degradation and social exploitation, even if it is not the root cause (Ottuh, 2020). Heteronormativity also permeates discussions of how we will address these problems. This occurs at the micro-level, such as sexuality and gender barriers to participation (Dorey, 2016) or at the macro-level, such as the continued use of exploitative economic systems (Smith Khanna, 2021). Therefore, in a queer-informed approach to ESD, we need to identify, explore, and challenge the influence of heteronormative norms on those that confluence with sustainable development.

An effective queer pedagogue should first aim to remove gendered and heteronormative language from both classroom materials and discourse (Neto, 2018). Second, they should not avoid discussions of queerness in the classroom when they arise naturally and should seek to explicitly tackle issues that affect queer people (Shlasko, 2005), like the discrimination taking place around the world. A useful exercise to employ is the "I cannot be me..." game, in which students are asked to complete this statement with reference to an aspect of their identity which would subject them to negative experiences should it be known in the context of the study. For example, in an exploration of social development in Nigeria, a student may complete the sentence as "I cannot be me in Nigeria as being gay is illegal". This is not limited to gueer identities, and a range of personal characteristics are fair game. This can be done individually and privately by students or shared with the whole class. It should, of course, come with the caveat that students need not share any details about themselves they are not yet ready to. The activity is not designed to demonise the topic of study, and an informed instructor will be careful not to allow it to reinforce stereotypes and misinformation. Instead, it should be used to challenge these stereotypes, draw awareness to themes such as discrimination, and as an opening to broader discussions about working to address these issues in the wider world.

Queering self-awareness

Self-awareness competence is "the ability to reflect on one's own role in the local community and (global) society, continually evaluate and further motivate one's actions, and deal with one's feelings and desires" (Rieckmann, 2018b, p.45). It is important to foster queer desires in the classroom (Fraser and Lamble, 2015). While queer pedagogy does have an element of the (homo)erotic to it (Rowe, 2012; Shlasko, 2005), this is not specifically about students'

choice of romantic or sexual partner. Instead, it is about celebrating the diversity of wants and needs among students, particularly when it comes to how they might use the education that pedagogues imbue them with. It is common in neo-liberal, marketized institutions to teach as though subject domain employment is the only outcome. As a result of this narrow view, students may feel ashamed that they hold such desires and go on to hide or repress them, mirroring the experience of many queer people around the world and limiting their ability to tackle in sustainable development in novel ways.

Self-disclosure is an important tool for fostering queer desires. Teachers are often told that their lives before and outside the classroom undermine their professional identities (Cayanus & Martin, 2008), but a queer pedagogue rejects this notion, speaking openly about who they are, experiences that they have had and the reasons why they do what they do (Nedela et al., 2018). They use their stories to build rapport with students (Cayanus, 2004), inform students about the range of options open to them and follow this up with a referral pathway of opportunities to engage in events, training programmes, clubs, societies and more taking place both inside and outside institutions. If our students are ever to fathom creative and innovative solutions to the existential crisis facing humanity, it is therefore important that they not feel ashamed of the parts of themselves that could bring forth these solutions.

Once students have awareness of their desires, they can begin to think about how to turn these into actions that advance sustainable development and learn from the actions that they have already taken, whether success or failures. In so doing, reflective practice is an effective pedagogical tool (Wall & Meakin, 2019). Students can consider utilising a range of known and accepted structured reflective models (e.g., Atkins & Murphy, 1993; Brookfield, 2005; Driscoll, 1994; Gibbs, 1988; Johns, 1995; Kolb 1984; Mezirow, 1981; Rolfe et al., 2001; Schon 1991). Teaching and assessment methods for reflection mostly focus on reflective writing such as essays, blogs, and diaries, but can also include presentations, group discussions and videos (Farr & Riordan, 2012). However, as Thomas-Reid (2021, p.11) cautions us to remember, "assessment is straight, both figuratively, and literally" as it is focused on performative actions to meet a supposedly objective standard. Queering reflective practice requires interrogating what is worth assessing and co-creating a meaningful way of doing this (Thomas-Reid, 2021). Thought it appears immediately contradictory, the philosophy of ungrading, in which letters, numbers or other such arbitrary markers of performance are set aside, along with some of their accompanying ideals and constraints (Gorichanaz, 2022), may offer some insight. Ask your students to share with you their understanding of how they would demonstrate they have mastered the topic or skill at hand, if freed from societal norms of degree classifications and top grades and allowed to step out from the role of the learner and into that of the master. Explore if you agree with those criteria. There, in the space between the two, likely lies an authentic measure of learning. But, in keeping with the importance of reflection, it would be most appropriate for the student to argue if they have met this co-created standard in a reflective piece of work, rather than be judged against it in a test, and most appropriate for the teacher to determine if the evidence presented is sufficient.

Seitz (2020) argues that a queer perspective on teaching sustainable development should have some element of disappointment to it. If students can understand what it means to do the work of sustainable development in the face of its inevitable disappointments, free from the ego of success, then they can fully engage with that work in the way that is best for themselves and the communities that work with. Utilising a typology of projects which are

not guaranteed successes are good ways of introducing controlled failure and disappointment into the classroom. However, it is key not to unnecessarily disadvantage students by tying assessment outcomes to project success. Instead, assessment should be focused on identifying the skills and experienced gained in the process, ideally through the use of reflective practice which, in turn, continues to embed self-awareness into our students.

Queering critical thinking

Critical thinking competence is "the ability to question norms, practices and opinions; reflect on own one's values, perceptions and actions; and take a position in the sustainability discourse" (Rieckmann, 2018b, p.44). Critical thinking is a core cognitive competency that underpins and facilitates the other aspects of ESD, enabling students to act for sustainable development (Taimur & Sattar, 2019). As a form of critical pedagogy, gueer pedagogy lends itself well to teaching critical thinking. A queer pedagogue already analyses and challenges everything, even themselves (Penell, 2021), and this should be done audibly and visibly for students. Modelling is an established strategy for teaching critical thinking, particularly through modelling questioning (Egan, 2019). This guestioning in itself can be gueered, by accepting the fluidity of knowledge and seeking to co-create the inquiry of it (Fortney, 2017). Some questions we might ask include: "What questions shall we ask of each other? After we explore those questions, what will have been left out? And then, what other questions shall we ask of each other?" (Shlasko, 2005, p.128) or "Why did I understand it to mean that, and not something else? How else could one read it? What else could it mean?" (Fortney, 2017). Within this typology of questioning, there may not be apparent answers, and students may wrestle with the complexities of this long after leaving the classroom (Pennell, 2021), which sets a long-term example for critical thought.

Carefully designed, collaborative problem-based learning is known to develop critical thinking skills (Carbogim et al, 2017; Seibert, 2021). This could be used in conjunction with peer review, another strategy for developing critical thinking in students (Silva et al., 2016). Simple methods of peer review include designating a discussion or task group member as the Devil's Advocate1, whose role is to actively challenge group members in their thinking and approach (whatever their own perspective may be), while more complex methods include peer marking (Kearney, 2019) and gallery walks (Ramsaroop & Petersen, 2020). It is noted that informal peer review is often preferred as formal peer review can introduce increased workloads for students, lead to deprioritisation of either the actual task or the peer review, and peer feedback may show bias and variance (Yuan, 2020).

Queering systems thinking

Systems thinking competence is "the ability to recognise and understand relationships, to analyse complex systems, to perceive the ways in which systems are embedded within different domains and different scales, and to deal with uncertainty" (Rieckmann, 2018b, p.44). There are a range of interconnecting and conflicting environmental, social, and economic systems that require study when attempting to work in the field of sustainable development. However, to illustrate this to students in a critical, queer-informed way, we need to avoid oversimplifying these systems, and make a greater effort to incorporate examples of non-linear or fuzzy systems. To further develop systems thinking in students, we can ask them to "process map" or "process model" (Roseman, 2013), some of the world's

"wicked problems" (Rittel & Webber, 1973) of which sustainable development is one (Pryshlakivsky & Searcy, 2013).

Queering future thinking

Future thinking competence, or anticipatory competence, is "the ability to understand and evaluate multiple futures – possible, probable and desirable – and to create one's own visions for the future, to apply the precautionary principle, to assess the consequences of actions, and to deal with risks and changes" (Rieckmann, 2018b, p.44). The climate crisis, and other emerging threats in sustainable development, will affect different people in different ways and will perpetuate existing inequity (Kommu et al., 2021). To understand and address these impacts, students must first explore past and current inequity as a starting point. Inequity does not emerge in stark, singular fashion, but rather is generated from a series of small actions and occurrences preceding and coinciding with one another 2. The teacher should aim to pose questions that highlight this inequity and its systemic root causes, then expose students to a range of information on the topics, particularly the lived experiences and own voices of those most affected (Crowley & LaGarrett, 2018). This exploration most certainly requires an intersectional approach (Jones & Wijeyesinghe, 2011; Villa-Nicholas, 2018). Teachers and students should not limit themselves in this exploration. New frontiers of queerness and new identities emerge every day, and we must examine how identities will intersect in the world we are building (or preventing), lest we in turn shift inequity from one group to another. Again, a focus on lived experience and own voices is important here, so inviting speakers into the classroom, or training students in methods of participatory inquiry and consultation so they can learn in the field most effectively achieves this.

Queering strategy

Strategic competence is "the ability to collectively develop and implement innovative actions that further sustainability at the local level and further afield" (Rieckmann, 2018b, p.44). To develop students' strategic competence, look at the success of queer-change makers, and dissect the power that their non-conformity has yielded through case studies and discussion groups.

Queering collaboration

Collaboration competence is "the ability to learn from others; understand and respect the needs, perspectives and actions of others (empathy); understand, relate to and be sensitive to others (empathic leadership), deal with conflicts in a group; and facilitate collaborative and participatory problem-solving" (Rieckmann, 2018b, p.44). Queer professionals develop powerful listening skills and emotional intelligence that allows them to navigate the difficulties of their identity in a professional space, termed "The Working Closet" (Cox, 2019). Drawing on, and informed by, The Working Closet, a queered curriculum for ESD includes explicit opportunities to teach the skills of collaboration such as communication, listening, empathy and emotional intelligence, rather than relying on these to be taught through the "hidden curriculum" (Orón Semper & Blasco, 2018). However, collaboration with other students and teachers is easy, given that these parties are usually incentivised to do so. For thorough challenges in collaboration, community-engaged learning (Comeau et al.,

2019) and service-based learning (Salam et al., 2019) are recommended, given they most accurately represent the variety of people one works with when attempting to solve the problems of the wider world, and their disparate, if not competing, goals and priorities (Seitz, 2020).

Queering problem-solving

Problem solving competence is "the overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive and equitable solutions that promote sustainable development" (Rieckmann, 2018b, p.44). Inquiry-based learning is very effective for building problem-solving skills (Khalaf & Zin, 2018) and is decidedly critical, if not queer, in its co-creative approaches (Wymer & Fulford, 2019; Snelling et al., 2019). This queerness can be extended by adopting queer methods of inquiry, such as those described in Ghaziani & Brim (2019). As such as we gather information, we need to continue to ask ourselves "what is the true subject?", "how do we measure?", "how do we capture narratives and experiences?" and, perhaps, most importantly, "are we truly listening?". Inquiry-based learning usually involves proposing a solution to issues under study or disseminating findings to a wider audience. For that, queer methods of design (Moeggenberg & Walton, 2019) and communication or participation (Brown & Nash, 2010) are particularly useful.

Conclusion

When examining queer pedagogy or indeed, any subject, through a queer lens, one is often left with more questions than answers (Fortney, 2017). The first of these questions is about the role of queer people in a sustainable future. While queer people may desire such a vision of the world, does this world desire queer people? As noted by Stonewall via Dorey (2016), The SDGs, the so-called hallmark of sustainable development, are notably silent on any reference to queerness. Inclusion is described only in terms of income measures, while the language of the goals focuses on age, sex, disability, race, ethnicity, origin, and religion. SDG5 Gender Equality's first target (5.1) is to "End all forms of discrimination against women and girls everywhere" but the indicator of that (5.1.1) is "Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex". For these goals, it is only cisgendered women and girls everywhere that will benefit, and gender is reduced to biology only. SDG10 Reduced Inequalities does not mention even sexual orientation, common to equality legislation throughout the world, leaving it neatly tucked away under terminology like "other status". When the SDGs discuss reducing discrimination, their indicators are about the number of harassments and similar incidents that are reported. They do not explicitly define what discrimination is, implying that an easy way for a nation to show progress towards SDG10 is to simply reduce the number of people reporting harassment rather than reducing the source of any harassment. The forms of equality explicitly noted in the SDGs are palatable to all nations on earth, even if they have differing views as to what that may mean. Queerness, however, is a way of being rejected throughout the world to greater or lesser degrees, even when the SDGs may prompt otherwise (Izugbara, 2022). As a truly queer pedagogue attempting to educate for sustainable development, our first duty is to resist a vision of a future that omits queerness, and that may mean a rapid change to, or even rejection of, the SDGs.

The second question that arises is around the ability to effectively queer anything as rigidly defined and measurable as a competency. While queer pedagogy can be about disruption with a view to true inclusion (Thomas-Reid, 2021), competencies can be seen as the ultimate example of performativity – a standard set by an unseen group of experts that one must meet or face exclusion from a certain environment. When we discuss competencies in ESD, are we saying that our students may be excluded from a sustainable future if they cannot master them? Therefore, would any attempt to queer these competencies just be an example of "conforming under the rainbow"?

Efforts to mainstream ESD at all levels of teaching and learning continue (Agbedahin, 2019) and are likely to do so for some time. What, then, is the future of queer pedagogy for, with, and within ESD? There is most certainly a need for more empirical work within the scholarship of teaching and learning to explore and evaluate practical teaching methods that reflect ESD generally and a queer-informed approach to ESD specifically. More conceptually, Stein et al. (2022) suggest that the current conceptualisations of ESD will not serve the ends it works towards, and will in fact exacerbate the problems it seeks to solve. Therefore, queer pedagogues must continue to not only question and deconstruct the existing structures that impact upon education, but also the structures we are currently building. Then, and only then, can development be truly sustainable.

8

References

Agbedahin, A. V. (2019). Sustainable development, Education for Sustainable Development, and the 2030 Agenda for Sustainable Development: Emergence, efficacy, eminence, and future. Sustainable Development, 27(4), pp. 669–680.

Atkins, S. and Murphy, K. (1993) Reflective Practice. Nursing Standard, 9(45), pp. 31–37.

Benstead, L.J. (2021). Conceptualizing and measuring patriarchy: The importance of feminist theory. Mediterranean Politics, 26(2), pp. 234–246.

Biermann, F., Kanie, N. and Kim, R.E. (2017). Global governance by goal-setting: the novel approach of the UN Sustainable Development Goals. Current Opinion in Environmental Sustainability, 26, pp. 26–31.

Brookfield, S. D. (2017). Becoming a Critically Reflective Teacher. John Wiley & Sons.

Browne, K., and Nash, C.J. (2010). Queer Methods and Methodologies: Intersecting Queer Theories and Social Science Research. Surrey: Ashgate Publishing Ltd.

Carbogim, F.D.C., Oliveira, L.B.D., Mendonça, É.T.D., Marques, D.A., Friedrich, D.B.D.C. and Püschel, V.A.D.A. (2017). Teaching critical thinking skills through problem-based learning. Texto & Contexto-Enfermagem, 26(4), Article ID: e1180017.

Cayanus, J.L. (2004). Effective instructional practice: Using teacher self-disclosure as an instructional tool. Communication Teacher, 18(1), pp. 6-9.

Cayanus, J.L. and Martin, M.M. (2008). Teacher self-disclosure: Amount, relevance, and negativity. Communication Quarterly, 56(3), pp. 325-341.

Comeau, D. L., Palacios, N., Talley, C., Walker, E. R., Escoffery, C., Thompson, W. W., & Lang, D. L. (2019). Community-engaged learning in public health: an evaluation of utilization and value of student projects for community partners. Pedagogy in Health Promotion, 5(1), 3–13.

Cox, M.B. (2019). Working closets: Mapping queer professional discourses and why professional communication studies need queer rhetorics. Journal of Business and Technical Communication, 33(1), pp. 1–25.

Crowley, R. M., & King, L. J. (2018). Making inquiry critical: Examining power and inequity in the classroom. Social Education, 82(1), 14–17.

Dalal, A. (2019). Explicating Environmental Patriarchy: An Examination Through Gender and Environment Perspectives. ANTYAJAA: Indian Journal of Women and Social hange, 4(2), 145–157.

Dorey, K. (2016). The Sustainable Development Goals and LGBT Inclusion. Stonewall International. https://www.stonewall.org.uk/system/files/sdg-guide.pdf

Egan, A. (2019). Confidence in critical thinking: Developing learners in higher education. Routledge.

Farr, F. and Riordan, E. (2012). Students' engagement in reflective tasks: An investigation of interactive and non-interactive discourse corpora. Classroom Discourse, 3(2), pp. 129–146.

Fortney, J. (2017). 'Inclusive Teaching: Queer Pedagogy', the Notebook, Reinert Center, 8th February. Available at: https://reinertcenter.com/2017/02/08/queer-pedagogy/. (Accessed: 16 February 2022).

Fraser, J. and Lamble, S. (2015). Queer desires and critical pedagogies in higher education: reflections on the transformative potential of non-normative learning desires in the classroom. Journal of Feminist Scholarship, 7, pp. 61–77.

Gibbs, G. (1988). Learning by Doing: A guide to teaching and learning methods. London: FEU

Giroux, H. (2020). 'Rethinking Education as the Practice of Freedom: Paulo Freire and the Promise of Critical Pedagogy', in Giroux, H. (ed.) On Critical Pedagogy. 2nd Edition. London: Bloomsbury Academic, pp.175–194.

Gorichanaz, T. (2022). "It made me feel like it was okay to be wrong": Student experiences with ungrading. Active Learning in Higher Education, Advance Online Publication. https://doi.org/10.1177/14697874221093640.

Hallinger, P. and Nguyen, V.T. (2020). Mapping the landscape and structure of research on education for sustainable development: a bibliometric review. Sustainability, 12(5), Article ID 1947.

Hodge, S., Mavin, T. and Kearns, S. (2020). Hermeneutic dimensions of competency-based education and training. Vocations and Learning, 13(1), pp. 27–46.

Izugbara, C., Sebany, M., Wekesah, F., & Ushie, B. (2022). "The SDGs are not God" Policy-makers and the queering of the Sustainable Development Goals in Africa. Development Policy Review, 40, e12558.

Johns, C. (1995). Framing learning through reflection within Carper's fundamental ways of knowing in nursing. Journal of Advanced Nursing, 22, pp. 226–234.

Jones, S. R., & Wijeyesinghe, C. L. (2011). The promises and challenges of teaching from an intersectional perspective: Core components and applied strategies. New Directions for Teaching and Learning, 125, pp. 11–20.

Kearney, S. (2019). Transforming the first-year experience through self and peer assessment. Journal of University Teaching & Learning Practice, 16(5).

Khalaf, B. K., & Zin, Z. B M. (2018). Traditional and Inquiry–Based Learning Pedagogy: A Systematic Critical Review. International Journal of Instruction, 11(4), pp. 545–564

Kolb, D. (1984). Experiential Learning. New Jersey

Kommu, V., Alexander, D. and Lingam, L. (2021). Gendered vulnerabilities and health inequities. In Climate Change and the Health Sector. India: Routledge, pp. 90–97.

Mezirow, J. (1981). A Critical Theory of Adult Learning and Education. Adult Education Quarterly, 32(1), pp. 3-24.

Moeggenberg, Z.C. and Walton, R. (2019). 'How queer theory can inform design thinking pedagogy', Proceedings of the 37th ACM International Conference on the Design of Communication. Portland, Oregon, 04–06 October. New York: Association for Computing Machinery, pp. 1–9.

Nedela, M. R., Murray, M. M., & Steelman, S. M. (2018). Using self-disclosure to manage student misconceptions in a human sexuality classroom. The International Journal of Critical Pedagogy, 9(1).

Nguyen, D.H. (2021). The Political Economy of Heteronormativity. Review of Radical Political Economics. OnlineFirst.

Orón Semper, J. V., & Blasco, M. (2018). Revealing the hidden curriculum in higher education. Studies in Philosophy and Education, 37(5), pp. 481–498.

Pennell, S. M. (2021). 'Queer Pedagogy'. In K.K. Strunk and S.A. Shelton (eds.) Encyclopaedia of Queer Studies in Education. Brill: Leiden, pp. 540–544.

Pennell, S.M. (2020). 'Queer Theory/Pedagogy and Social Justice Education' in R. Papa (ed.) Handbook on Promoting Social Justice in Education. Switzerland: Springer: Cham, pp. 2291– 2311.

Pryshlakivsky, J. and Searcy, C. (2013). 'Sustainable Development as a Wicked Problem'. In S.F. Kovacic and A. Sousa-Poza (eds.) Managing and Engineering in Complex situations. Springer: Dordrecht, pp. 109-128.

Ramsaroop, S., & Petersen, N. (2020). Building professional competencies through a service learning 'gallery walk' in primary school teacher education. Journal of University Teaching & Learning Practice, 17(4).

Rieckmannn, M. (2018a). 'Learning Key themes in education for sustainable development', in Leicht, A., Heiss, J., and Byun, W.J. (eds.) Issues and trends in Education for Sustainable Development. Paris: UNESCO Publishing, pp.61–86.

Rieckmannn, M. (2018b). 'Learning to transform the world: key competencies in Education for Sustainable Development', in Leicht, A., Heiss, J., and Byun, W.J. (eds.) Issues and trends in Education for Sustainable Development. Paris: UNESCO Publishing, pp.39–60.

Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a General Theory of Planning. Policy Sciences, 4(2), pp. 155–169.

Rolfe, G., Freshwater, D. and Jasper, M. (2001). Critical reflection in nursing and the helping professions: a user's guide. Basingstoke: Palgrave Macmillan.

Rosemann, M. (2013). 'Preparation of Process Modeling' in Becker, J., Kugeler, M. and Rosemann, M. (eds.) Process Management: A Guide for the Design of Business Processes. Berlin: Springer, pp.41–78.

Rowe, C. A. (2012). Erotic pedagogies. Journal of Homosexuality, 59(7), pp. 1031-1056.

Salam, M., Awang Iskandar, D. N., Ibrahim, D. H. A., & Farooq, M. S. (2019). Service learning in higher education: A systematic literature review. Asia Pacific Education Review, 20(4), pp. 573–593.

Schon, D. (1983). The Reflective Practitioner. London: Temple Smith

Seibert, S.A (2021). Problem-based learning: A strategy to foster generation Z's critical thinking and perseverance. Teaching and Learning in Nursing, 16(1), pp.85-88.

Seitz, D.K. (2020). "It's Not About You": Disappointment as Queer Pedagogy in Community-Engaged Service-Learning. Journal of Homosexuality, 67(3), pp.305–314.

Shelton, S.A. (2021). Queer Contemplative Pedagogy: Challenging Gender and Sexuality Norms through Contemplation. Journal of Homosexuality, pp.1–17.

Shlasko, G. D. (2005). Queer (v.) pedagogy. Equity & Excellence in Education, 38(2), pp.123-134.

Silva, H., Lopes, J., Dominguez, C., Payan-Carreira, R., Morais, E., Nascimento, M. and Morais, F. (2016). Fostering critical thinking through peer review between cooperative learning groups. Revista Lusófona de Educação, 32, pp.31–45.

Smith Khanna, P. (2021). Sustainable Masculinities and Degrowth: Pathways to Feminist Post-Growth Societies, Institute for Political Ecology.

Snelling, C.A., Loveys, B.R., Karanicolas, S., Schofield, N.J., Carlson–Jones, W., Weissgerber, J., Edmonds, R. and Ngu, J. (2019). Partnership through co-creation: Lessons learnt at the University of Adelaide. International Journal for Students as Partners, 3(2), pp.62–77.

Stein, S., Andreotti, V., Suša, R., Ahenakew, C., & Čajková, T. (2022). From "education for sustainable development" to "education for the end of the world as we know it". Educational Philosophy and Theory, 54(3), pp. 274–287.

Taimur S. and Sattar H. (2019). 'Education for Sustainable Development and Critical Thinking Competency' in W. Leal Filho, A. Azul, L. Brandli, P. Özuyar, T. Wall (eds), Quality Education: Encyclopaedia of the UN Sustainable Development Goals. Springer: Cham.

Thomas-Reid, M. (2021). Queer Pedagogical Theory. In Oxford Research Encyclopedia of Education.

Villa-Nicholas, M. (2018). Teaching intersectionality: Pedagogical approaches for lasting impact. Education for Information, 34(2), pp. 121–133.

Wiek, A., Bernstein, M.J., Foley, R.W., Cohen, M., Forrest, N., Kuzdas, C., Kay, B. and Withycombe Keeler, L. (2016). 'Operationalising competencies in higher education for sustainable development' in M. Barth, G. Michelsen, I. Thomas and M. Rieckmannn (eds), Routledge Handbook of Higher Education for Sustainable Development. London: Routledge, pp. 241–260.

Wymer, K. and Fulford, C. (2019). Students as co-producers of queer pedagogy. Journal of Effective Teaching in Higher Education, 2(1), pp.45-59.

Yuan, Z. (2020). Scaling Classroom Education with Peer Review: A Natural Language Processing Approach, Northwestern University.

Produced by University and College Union, Carlow Street, London NW1 7LH T: 020 7756 2500 W: www.ucu.org.uk November 2022