Digital Humanities in the India Rim

Contemporary Scholarship in Australia and India

Hart Cohen   Ujjwal Jana   Myra Gurney

Cover concept by Thalan-Harry Cowlishaw, designed using original image provided by Freepic, https://www.freepik.com, CC BY-NC

Cover design by Jeevanjot Kaur Nagpal

9. Are we ready to 'screw around' together? Barriers to institutionalisation of DH pedagogy in literature departments

Ritam Dutta

Abstract

Founded on the philosophy of the constructivist and collaborative pursuit and production of new knowledge, pedagogy is at the very heart of Digital Humanities (DH). However, among the challenges for the institutionalisation of DH pedagogy, particularly in literature departments, is a dearth of sufficient literature on DH pedagogy—a concern echoed in "Where's the Pedagogy?" by Stephen Brier (2012) among other scholar-practitioners of DH. As Hirsch (2012a) points out, the focus of the literature is predominantly "on the theories, principles, and research practices associated with the Digital Humanities—past and present—and not on issues of pedagogy". Teaching is often "bracketed off" as an afterthought in the discussion on DH, which is a reflection of the practical realities of DH studies, particularly in literature departments. Hirsch argues that the bracketing off or complete exclusion of pedagogy in critical discussions of the Digital Humanities, as is often the case, reflects, and reinforces, the conflicting contrast between teaching and research of DH in academia.

The chapter highlights the discrepancy between traditional pedagogical approaches prevalent in literature departments, especially in India, and the collaborative, hands-on methods

intrinsic to DH practice. Traditional approaches often focus on the delivery of content from teacher to student, whereas DH emphasises inquiry-based learning, experimentation, and collaboration among peers and instructors. In the context of DH, a "pedagogy of digital experimentation" involves students actively engaging in making and doing, mirroring the work of DH professionals. This approach encourages collaborative exploration and discovery, aligning with the core tenets of DH, such as practice, discovery, and community. However, many literature departments are not prepared to embrace this approach, which involves what Ramsay (2010/2014) terms "screwing around" or "surfing and stumbling" as part of the research methodology.

Shifting towards a pedagogy of active experimentation requires a significant paradigm shift, challenging traditional notions of teaching and learning. This shift may lead to discomfort or uncertainty for both teachers and students as they navigate unfamiliar territories. Bonds (2014) suggests that this discomfort arises from the need to co-produce knowledge in a constructivist manner, rather than passively receiving it. To bridge the gap between traditional pedagogy and DH practices, there needs to be a re-evaluation of entrenched ideas about teaching and scholarship. This re-evaluation should challenge limited perceptions of the teacher's role and the connection between teaching and scholarship. Without this re-evaluation, Digital Humanities risks being confined to superficial applications like computer-assisted text analysis, rather than realising its full potential in higher education. Bringing pedagogy to the forefront of Digital Humanities in literature programs requires a fundamental reconsideration of educational practices and the roles of teachers and students. Embracing collaborative, experimental approaches can pave the way for the integration of DH into mainstream educational frameworks, fostering innovation and deeper engagement with humanities disciplines.

Keywords

Introduction

The 21st-century pedagogical practices have been shaped immensely by the phenomenal growth of the internet and digital technologies. New modes of research and teaching have been devised, and these have claimed niches in academic departments in universities all over the world. Therefore, these new developments, including the emerging discipline of Digital Humanities (DH) studies, warrant our attention to understand what has changed and what new possibilities have emerged for pedagogical practices after the digital turn—especially in the field of humanities, which was previously considered to be the most divorced from technology.

However, research (Shanmugapriya & Menon, 2020) has found that DH programs and courses in higher education in India are few and far between, although several critical events in the recent past, such as the launch of Digital Humanities Alliance of India in 2018, governments projects like "Digitize India"[1] and "Digital India,"[2] and an increase in the number of DH courses, conferences, workshops, and seminars indicate that DH in India is steadily moving forward. Additionally, several academic institutions and individual humanities scholars have helped to create awareness about DH through focused networks in the last couple of years. These developments have resulted in the introduction of DH programs in many more universities across the country (Diwan, 2016).

However, Shanmugapriya and Menon (2020) also indicate that despite a discernible trend for employing "computer applications as an 'appendix' of various disciplines" (n.p.; para 12), including that of humanities, "to ensure employment opportunities in the digital era and to meet the global demands" (n.p.; para 12), attempts at "humanities-based critical inquiry […] is absent in the curricula of the academic universities […] [and] while there is an evidence of engagement with digital technologies for higher education and digital pedagogy" (n.p.; para 12), it doesn't often extend to "the critical realm of inquiry and investigation in the field of humanities" (n.p.; para 12).

This is due to multiple challenges, including some multifaceted

---

1   See https://www.digitizeindia.gov.in/
2   Ibid.

infrastructural challenges. For instance, negotiating the digital divide in higher education in India is still a big challenge. Pedagogical content development and instructional design for multi-lingual and socio-culturally diverse classrooms, integration of archival materials, training teachers and researchers in new technologies, easy access to DH labs and related digital infrastructures, challenges related to development and theorisation of digital pedagogy, and paucity of funding and institutional support for DH programs in Indian universities are also areas that require intervention. Other challenges include defining and locating the subject within discipline-specific boundaries, the absence of a theoretical framework around questions of DH pedagogy, the learning environment in traditional teacher-centric classrooms, and teachers' beliefs about how students learn or should learn (Sneha, 2016).

Due to lack of space, I shall focus only on the challenges of the learning environment in traditional teacher-centric classrooms and teachers' beliefs about how students learn or should learn in the rest of this exposition on the present realities of DH pedagogy in India.

Making sense of DH pedagogy

Based on the philosophy of constructivism and collaborative production of new knowledge, pedagogy is at the heart of Digital Humanities. However, DH scholar Sneha notes:

> [I]nstitutional efforts at building curricula specifically around DH-related concerns have been few, with the prominent ones in India being the courses at Jadavpur University and Presidency University in Kolkata, and more recently Srishti School of Arts, Design and Technology in Bangalore (2016, p. 45).

A reason for this might be that the possibilities of DH have still not been explored adequately, and to what extent DH might contribute qualitatively to addressing or even furthering some specific disciplinary concerns in the humanities remains open to speculation, even as the field gains institutional stability in India as in the other parts of the world.

Generally understood as an exploration of the "intersection between information technology and humanities, DH has grown to become [a highly funded] interdisciplinary field of research" (Sneha, 2016, p.14) in humanities over the last couple of decades. Nevertheless, as Sneha

points out, studies on DH mark the difficulties in defining and locating the subject within discipline-specific boundaries, as Digital Humanities research spans archives, to social media, and everything in between, which is a specific obstacle for the "curriculisation" of DH:

> [DH has been] called a phenomenon, field, discipline and a set of convergent practices—all of which are located at and/or try to understand the interaction between digital technologies and humanities practice and scholarship (Sneha, 2016, p. 14).

However, the field has rapidly become popular in India, with several universities now pursuing DH studies, and not just with interdisciplinary teaching and research within existing humanities or media science departments, but to explore and invent creative and inventive knowledge-making processes in functional institutional spaces of its own. However, there is a still lack of consensus on what a DH pedagogy entails and scholars and practitioners in many instances have stopped short of fully embracing it as a discipline (Sneha, 2016).

The lack of a precise definition of DH and its location within established disciplinary contexts, coupled with the near absence of a theoretical framework around questions of DH pedagogy, are also obstacles to understanding what the field entails and its many future possibilities in the Indian context (Sneha, 2016). Our limitations in comprehending the disciplinary area have, therefore, effectively limited the prospects of DH pedagogy in India to that of 'training' for increasing students' employment prospects after graduation and for channelling greater funding for the humanities (Bonds, 2014). The question that we need to ask ourselves is: can we conceptualise a role for DH pedagogy in India beyond skill-building to that of helping students to critically engage with questions of socio-political concern?

Curriculisation of DH

The curriculisation of DH has its problems. As Sneha (2016) points out, the curriculisation of DH courses in three universities in India indicates the "specific academic concerns [for DH] in the Indian context, and the disciplinary challenges and questions that it may open up for the teaching-learning process" (p. 45).

Among these challenges, particularly in literature departments, is a dearth of literature on DH pedagogy—a concern echoed in Brier (2012), among other scholar-practitioners of DH. For instance, echoing Brier, Hirsch (2012b) points out that the focus of the literature is predominantly:

> [...] on the theories, principles, and research practices associated with the digital humanities—past and present—and not on issues of pedagogy (Hirsch, 2012b, p. 4).

Teaching, Hirsch (2012b) adds, is often "bracketed off" as an afterthought in discussion on DH, which is a reflection of the practical realities of DH studies. Hirsch (2012b) argues that the bracketing off of or complete exclusion of pedagogy in critical discussions of Digital Humanities, as is often the case, reflects and reinforces the conflicting contrast between the teaching and research of DH in academia.

One reason for the lack of sufficient literature on DH pedagogy could be that we have not been able to define DH adequately, far less fully understand the constantly evolving nature of the digital and its changing facets in the context of DH. Moreover, as Sneha (2016) points out, we are still passing through the transition "from the analogue to the digital", and the simultaneous existence of both modes makes it challenging to teach DH (p. 45). Another crucial reason is that the constructivist, collaborative nature of DH studies does not fit our traditional approaches to formal education, including instructional designs, institutional policies, and teachers' beliefs.

Project-based learning

DH studies often follow a pedagogical approach based on constructivist and collaborative methodologies. Consequently, learning in DH is frequently 'project-based'. This makes curriculum design and course evaluation difficult, particularly in the Indian context, where project-based learning, at least in most humanities and social science departments, is still not very common. Most Indian teachers are not adept at teaching and evaluating students through project-based learning, which differs significantly from traditional coursework and requires teachers to possess a particular skillset and mindset needed

for teaching collaboratively. Similarly, it requires that students possess some specific interpersonal and technical skills that "many students have not yet developed" (Bonds, 2014, p. 149).

DH scholar Alan Liu believes that the:

> ... 'co-developing' model of teaching with technology supplement[s] the usual closed discursive circuit of the instructor-talking-to-the-student (and vice versa) with an open circuit of the instructor-and-student talking to others (2009, p. 20).

Students typically learn to co-produce knowledge collaboratively with their teacher(s) and peers through 'practice' and 'discovery'—or, in other words, through "screwing around" as a methodology (Ramsey, 2014). Such a methodology, where teachers and students collaboratively produce knowledge through experimentation rather than pursue the normative methodology of direct transfer of knowledge from the teacher to the students (known as the 'banking model'), warrants a pedagogical paradigm shift that could create an unsettling learning environment for both the teacher and her students (Fyfe, 2011). However, Fyfe (2011) also believes that it "can also be a terrific opportunity" for engaging students "in shared projects of inquiry" and exploration, only if we could "imagine a pedagogy of digital experimentation" (p. 85)—one that prompted Ramsey to ask if we are ready to accept "screwing around" as research (and may I add, pedagogical?) methodology (Ramsey, 2014).

Constructivism: A pedagogical paradigm shift

Instead of inculcating deep learning, which should be the goal of education, the current education system in India focuses on preparing students for examinations, often through rote memorisation. The traditional lecture-based teaching method in schools, colleges, and universities propels students towards rote memorisation instead of creative thinking and collaboration. Teaching in this manner often creates cognitive dissonances for the students, because learning in our lifeworld is inter-personal and inter-textual, spanning multiple contexts, multiple social worlds, and various 'funds of knowledge' that we already possess. Since learning involves meaning-making, learning in our lifeworld is also essentially dialogic and extends beyond the classroom space, both

temporally and spatially. That is, it seeks to connect with the students' present, past, and possible (future) life experiences (Bruner, 1996), both inside and outside the classroom (Dutta, 2015a; 2015b).

According to Fink's (2013) taxonomy, significant learning includes several components besides "foundational knowledge", that is, understanding and recalling information and ideas taught in classrooms. Some of the other areas of Fink's taxonomy of significant learning are: "application", "integration", "human dimension", and "caring". Therefore, significant learning is not (and cannot be) limited to simply memorising information and being able to recall it when required (Ayling, 2010). Significant learning involves much more, not the least of which is being able to make connections between one's life and one's learning—that is, in acting on the knowledge, in connecting the proverbial dots. However, the goal-based, task-oriented curricula of most schools often do not allow room for such an active pursuit after connections (Dutta, 2015b).

The multiple funds of knowledge that students bring to the classroom are often not acknowledged. Students "are often implicitly asked to set aside what and how they have come to know in the world" (Moje et al., 2004., p. 5) in favour of the dominant ways of knowing valued in the classroom. Many scholars have also pointed out how schools often, in practice, fail to acknowledge and tap into students' "knowing-in-the-world" (Moje et al., 2004; Dyson, 1993; Tagore, 2009). Indeed, some have even argued that far from acknowledging students' "knowing-in-the-world", schools often actually perpetuate a sort of epistemic violence on students by cutting them off from the pulse of their cultural and social lives (Gruenewald, 2003; Tagore, 2009). This excision makes education "unreal, heavy and abstract" (Tagore, 2009) and causes disconnect (Dyson, 1993; Noddings, 2005) and ennui or boredom (Sidorkin, 2004) in students (Dutta, 2015a; 2015b). The root of the problem is the teacher-centric learning environment of conventional classrooms, where instruction is typically always unilateral. Therefore, we must embrace a different pedagogical pathway that would allow our students to develop their autonomy, augment their sense of self as young scholars, and promote interpersonal growth and dialogic learning through collaborations.

Constructivism is one such pedagogical approach that encourages students to research, reflect, collaborate, take ownership of their learning, and be both critical and creative through learning projects that are intrinsically meaningful and motivating for them. As an approach, it is best suited for learning through the 'making and doing' philosophy at the heart of DH pedagogy. Constructivism as an epistemological philosophy of knowledge acquisition prioritises knowledge construction over knowledge transmission. According to constructivist philosophy, new knowledge is socially constructed by learners, based on their prior knowledge, through collaboration on meaningful and authentic tasks (Sneha, 2016). Thus, within a constructivist pedagogy, activities supplement lectures, and students are encouraged to build upon their prior knowledge or their 'knowing-in-the-world'.

Dyson (1993) shows how this can be achieved in the classroom space through a permeable curriculum—a porous curriculum that allows for the percolation of the "outside", like the playground, the community, the church, and the *āddā*, into the classroom. It is a curriculum that allows and makes provision for connecting the various unofficial social worlds (such as the "peer sphere" and the "home sphere") of the student with the official school world ("official sphere") and encourages students to draw from their various "funds of knowledge" (Moll et al., 1992). A permeable curriculum allows us to acknowledge all the diverse lived experiences of our students and their ways of taking and meaning-making in the world—at home, in the community, in interaction with peers, and through participation in popular culture—as valid sources of knowledge, informing their learning in school. Thus, constructivism emphasises a learner-centric, and learner-directed, collaborative pedagogic style that allows students to learn by participating in authentic tasks with scaffolding from teachers.

Vygotsky (1978) argued that knowledge is inseparable from the socio-cultural context it is embedded in and that all higher-order mental functions are social in nature. Therefore, within the social constructivist approach to pedagogy, the role of the teacher is no longer that of the sole dispenser of knowledge but rather that of a motivator, mentor, guide, and resource person to the students.

Constructivism does not acknowledge the possibility of any objective knowledge that is "out there" independent of the knower. According

to the constructivist philosophy, the only knowledge is that which we construct for ourselves socially through collaborative engagements within our "own world". Differentiating between the world "out there" and the students "own world" allows a teacher to choose the type of pedagogy to follow in a constructivist classroom (Bonds, 2014). An effective educator within a constructivist paradigm must primarily engage with and build upon students' "funds of knowledge" (Moll et al., 1992) or the prior knowledge and beliefs about the lived world that students already possess and bring with them into the classroom. Students' prior knowledge or knowing-in-the-world forms the base on which new knowledge is built within a constructivist paradigm. A constructivist educator must then help students realise that there are multiple ways of making meanings of any act or utterance, and we dialogically negotiate meaning from our unique ideological positions within the particular context of an act or utterance (Bakhtin, 1984). Therefore, paying attention to students' experiences in local contexts and allowing them the autonomy to take ownership of their learning lives is essential for teachers. But being moored to a "school-centric curriculum" (instead of a student-centric curriculum), most teachers fail to surmount the "Berlin Wall" that their syllabi erect between their teaching and the rich pedagogical possibilities afforded by the cultural lives of their students outside of classrooms (Dutta, 2015a).

Trying to choose between the world "out there" and the students' "own world" (Bonds. 2014) (which includes the home, the playground, the canteens, the *āddā*s, popular culture, and even the third spaces inside the classrooms) often puts the teacher in an acute dilemma. However, simply choosing the latter over the former usually does not help much, because teachers often do not have much control over the curriculum, the learning environment in an institution, the instructional design of courses, and students' learning habits—all of which require an overhaul if we are to succeed with constructivist pedagogy. We need a constructivist instructional design that does not direct students towards singular solutions to problems—academic or otherwise—but rather, through social constructivism in the classroom, helps students to develop social, emotional, and cognitive skills; in other words, life skills.

Problems with learner-centric education reforms in India

Despite sustained endeavours to move from the teacher-centric paradigm to a more learner-centric paradigm, the Indian education system is still dominated by rote learning. Research (Brinkmann, 2015; Schweisfurth, 2011; Vavrus, 2009) suggests several prevalent cultural beliefs opposed to the tenets of learner-centric education (LCE) as the reason for such conservatism. Unfortunately, as Sneha (2016) notes, these cultural beliefs, which are one of the primary impediments to a fully-fledged national implementation of LCE, have not yet been adequately researched in India. It is, however, important to engage with cultural beliefs, particularly those to which many educators subscribe, if we hope to make our education system learner-centric and constructivist (Brinkmann, 2015; Richardson, 1996; 2003; Sanger & Osguthorpe, 2011).

Besides the beliefs of individual teachers, there is also the influence of the "folk psychology" of culture (Bruner, 1996) on teachers. Each culture, according to Bruner (1996), has a distinctive "folk psychology", or "deeply ingrained culturally inherited beliefs […] [that] are difficult to override" (Brinkmann, 2015, p. 344). Similarly, other researchers like Robin Alexander (2001) who studied pedagogical differences across five countries (India, Russia, France, the UK, and the USA), have argued that culture has a powerful influence on teachers' thinking and practice. Clarke (2001), Rao et al. (2003), Sarangapani (2003), Gupta (2006), and Batra (2009) have also noted that a large majority of the pedagogical beliefs of Indian educators are rooted in their cultural perspectives on class, caste, gender, social inequality, etc., making it difficult for them to change these beliefs.

Besides cultural perspectives, the beliefs of teachers are often also shaped by the educational contexts they find themselves in, including how they are treated and supported (or not) by their superiors—both at the institutional level and within the larger educational system. The educational context often plays a significant role in mediating between a teacher's beliefs and her praxis: even teachers with learner-centric beliefs would struggle to ditch the chalk-talk or board-work, unless the class strength, the examination practices, the prescribed textbooks, the school administration, etc., are conducive to learner-centric pedagogy.

Without professional autonomy, foundational knowledge, or practical skills, a teacher's learner-centric beliefs on their own will not effectively create a learner-centric environment or bring about any change in the pedagogical practices in her classroom—which is one of the limitations of the scant research done on this topic in India thus far (Brinkmann, 2015). However, 'teacher beliefs' is nevertheless an important but relatively unexamined area in the literature on Indian educational reform and, therefore, warrants our focus.

Brinkmann (2015) argues that we cannot wholly comprehend the beliefs of teachers without considering the cultural contexts shaping these beliefs. Thus, it is vital to identify the shared cultural patterns in individual teacher's beliefs. However, in order to shift to a learner-centric education system from a teacher-centric one, there also needs to be institutional changes, including changes in the schools' systemic contexts and teachers' professional identity and autonomy (Brinkmann, 2015). Scholars like Batra (2005), Dyer et al., (2004), and Ramachandran et al., (2008) argue that, rather than considering teachers rightly as reflective practitioners, we presently view them "as technicians who must passively implement pre-designed ideas from outside 'experts'" (Brinkmann, 2015, p. 354)—which is another challenge for creating learner-centric, constructivist classroom environments necessary for DH pedagogy, based on a philosophy of experimentation or "screwing around" (Sneha, 2016).

Conclusion

Learning through experimentation—that is, through "making and doing", or "through building"—is at the heart of DH pedagogy (Ramsay, 2013, p. 245). Learning in a constructivist manner like this adds to what Fink would have called students' "life file […] where they put the lessons from everyday life" to draw from when needed (Bonds, 2014, p. 153). In India, particularly, for want of a precise theorisation of the key concerns and objectives of the discipline, practice mapping is presently the only viable option through which one may hope to realise the contents, structures, and methods of instruction in Digital Humanities pedagogy. However, research suggests that, whether because of teachers' beliefs, folk psychology, or the adverse educational

context that teachers regularly find themselves in, we are still not quite ready to experiment or 'screw around' with how our students might learn in classrooms. Consequently, instead of growing into an emergent field of critical scholarship with immense possibilities, Digital Humanities—an area whose institutional success hinges on scholar-practitioners "screwing around together" (Ramsay, 2010) as research and pedagogical methodology—is presently relegated to the domain of skills-training for the better employability of students. Until the time we are equipped to consider Digital Humanities pedagogy as more than just skill training, DH studies will remain unrelated to and ill-defined in relation to higher education goals (Bonds, 2014).

Works Cited

Alexander, R.J. (2001). *Culture and Pedagogy: International Comparisons in Primary Education*. Blackwell.

Alvarado, R.C. (2012). The Digital Humanities Situation. In M.K. Gold (Ed.). *Debates in the Digital Humanities* (Vol. 1). University of Minnesota Press. https://doi.org/10.5749/9781452963754

Aoki, T.T. (1986/1991). Teaching as Indwelling between Two Curriculum Worlds. In W. Pinar, & R. Irwin (Eds). *Curriculum in a New Key: The Collected Works of Ted T. Aoki.* (pp. 159–165). Lawrence Erlbaum Associates.

Arms, W., & Larsen, R. (2007). *Building the Infrastructure for Cyberscholarship*. National Science Foundation.

Ayling D. (2010). Designing Courses for Significant Learning. http://tlcommunityunitec.ning.com/profiles/blogs/designing-courses-for

Bakhtin, M.M. (1984). *Problems of Dostoevsky's Poetics*. University of Minnesota Press.

Batra, P. (2005). Voice and agency of teachers: A missing link in the National Curriculum Framework. *Economic and Political Weekly 40*(36), 4347–4356.

Batra, S. (2009). Inequalities in elementary education. In P. Rustogi (Ed.). *Concerns, Conflicts and Cohesions: Universalization of Elementary Education in India*. (pp. 102–124). Oxford University Press.

Bhaba, H.K. (1990). The third space: Interview with Homi Bhabha. In J. Rutherford (Ed.). *Identity: Community, Culture, Difference.* (pp. 207–221). Lawrence & Wishart.

Bonds, E.L. (2014). Listening in on the conversations: An overview of Digital Humanities pedagogy. *The CEA Critic* 76(2), 147–157. https://dx.doi.org/10.1353/cea.2014.0017

Brier, S. (2012). Where's the pedagogy? The role of teaching and learning in the Digital Humanities. In M.K. Gold (Ed.). *Debates in the Digital Humanities* (Vol. 1). University of Minnesota Press. https://doi.org/10.5749/9781452963754

Brinkmann, S. (2015). Learner-centred education reforms in India: The missing piece of teachers' beliefs. *Policy Futures in Education 13*(3), 342–359. https://doi.org/10.1177/1478210315569038

Bruner, J. (1996). *The Culture of Education*. Harvard University Press. https://doi.org/10.4159/9780674251083

Burdick, A., Drucker, J., Lunenfeld, P., Presner, T., & Schnapp, J. (2016). *Digital Humanities*. MIT Press. https://mitpress.mit.edu/books/digitalhumanities

Cantu, D.A. (2001). *An Investigation of the Relationship Between Social Studies Teachers' Beliefs and Practice*. Edwin Mellen Press.

Chakrabarti, M. (1993). *Tagore and Education for Social Change*. Gian Publishing House.

Chan, K.W., & Elliott, R.G. (2004). Epistemological beliefs across cultures: Critique and analysis of belief structure studies. *Educational Psychology 24*(2), 123–142. https://doi.org/10.1080/0144341032000160100

Clarke, P. (2001). *Teaching and Learning: The Culture of Pedagogy*. Sage.

Clarke, P. (2003). Culture and classroom reform: The case of the district primary education project, India. *Comparative Education 39*, 27–45. https://doi.org/10.1080/03050060302562

Clement, T. (2012). Multiliteracies in the undergraduate digital humanities curriculum: Skills, principles, and habits of mind. In B.D. Hirsch (Ed.). *Digital Humanities Pedagogy: Practices, Principles and Politics.* (pp. 368–388). Open Book Publishers.

Collins, K.M. (2013). *Ability Profiling and School Failure: One Child's Struggle to be seen as Competent*. Routledge. https://doi.org/10.4324/9780203802533

Dagar, V., & Yadav, A. (2016). Constructivism: A paradigm for teaching and learning. *Arts and Social Sciences Journal 7*(4), 1–4.

Diwan, R. (2016). State of Digital Humanities in India. *Hastac*. https://www.hastac.org/blogs/radhikadiwan/2016/10/12/state-digital-humanities-india

Dutta R. (2015a). The integrated curriculum and the place(s) of learning in higher education: Notes from an Indian university campus. In F. Uslu (Ed.). *Proceedings of INTCESS'15–2nd International Conference on Education and Social Sciences.* (pp. 1394–1407). OCERINT.

Dutta, R. (2015b). "Let's Talk": Promoting dialogue and answerability in critical humanities education with permeable curriculum and an āddā-based pedagogy. *Kultura-Społeczeństwo-Edukacja 7*(1), 35–59. https://www.doi.org/10.14746/kse.2015.1.3

Dyer, C., Choksi, A., Awasty, V., & et al., (2004). Knowledge for teacher development in India: The importance of 'local knowledge' for in-service education. *International Journal of Educational Development 24*, 39–52. https://doi.org/10.1016/j.ijedudev.2003.09.003

Dyson, A. H. (1993). Negotiating a permeable curriculum: On literacy, diversity, and the interplay of children's and teachers' worlds. *NCTE Concept Papers 9*, 1–40. National Council of Teachers of English.

Edmond, J. (2016). Collaboration and Infrastructure. In S. Schreibman, R. Siemens, & J. Unsworth (Eds). *A New Companion to Digital Humanities*. Wiley & Sons, Ltd. https://doi.org/10.1002/9781118680605.ch4

Eshach, H. (2007). Bridging in-school and out-of-school learning: Formal, non-formal, and informal education. *Journal of Science Education and Technology 16*(2), 171–190. https://doi.org/10.1007/s10956-006-9027-1

Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research 38*(1), 47–65. https://doi.org/10.1080/0013188960380104

Fink, L.D. (n.d.). A self-directed guide to designing courses for significant learning. *Teaching and Learning Community at Unitec*. http://tlcommunityunitec. ning.com/

Faull, K.M., & Jakacki, D.K. (2015). Digital learning in an undergraduate context: Promoting long-term student-faculty place-based collaboration. *Digital Scholarship in the Humanities*. https://doi.org/10.1093/llc/fqv050

Fink, L.D. (2013). *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. John Wiley & Sons.

Freire, P., & Ramos, M.B. (Trans.). (1970). *Pedagogy of the Oppressed*. Continuum.

Fyfe, P. (2011). How to not read a Victorian novel. *Journal of Victorian Culture 16*(1), 84–88. https://doi.org/10.1080/13555502.2011.554678

Gold, M.K. (2012a). Day of DH: Defining the Digital Humanities. In M.K. Gold (Ed.). *Debates in the Digital Humanities* (Vol. 1). University of Minnesota Press. https://doi.org/10.5749/9781452963754

Gold, M.K. (Ed.). (2012b). *Debates in the Digital Humanities* (Vol. 1). University of Minnesota Press. https://doi.org/10.5749/9781452963754

González N., Moll L., Deborah N., Amanti C. (2005). *Funds of Knowledge: Theorizing Practices in Households, Communities, and Classrooms*. New Jersey.

Gruenewald, D.A. (2003). Foundations of place: A multidisciplinary framework for place-conscious education. *American Educational Research Journal 40*(3), 619–654. https://doi.org/10.3102/00028312040003619

Gupta, A. (2006). Early childhood education, postcolonial theory, and teaching practices. In *India: Balancing Vygotsky and the Vedas*. Palgrave Macmillan. https://doi.org/10.1057/9780312376345

Hirsch, B.D. (2012a). Introduction: Digital Humanities and the place of pedagogy. In B.D. Hirsch (Ed.), *Digital Humanities Pedagogy: Practices, Principles and Politics.* (pp. 3–30). Open Book Publishers. https://www.doi.org/10.11647/OBP.0024

Hirsch, B.D. (Ed.). (2012b). *Digital Humanities Pedagogy: Practices, Principles and Politics*. Open Book Publishers. https://www.doi.org/10.11647/OBP.0024

Ives, M. (2014). Digital Humanities pedagogy: Hitting the wall and bouncing back. *CEA Critic 76* (2), 221–224. https://dx.doi.org/10.1353/cea.2014.0016

Jakacki, D., & Faull, K. (2016). Doing DH in classroom: Transforming humanities curriculum through digital engagement. In C. Crompton, R. J. Lane, & R. Siemens (Eds). *Doing Digital Humanities: Practice, Training, Research*. (pp. 358–372). Routledge.

Liu, A. (2009). Digital Humanities and academic change. *English Language Notes 47* (Spring/Summer), 17–35. https://doi.org/10.1215/00138282-47.1.17

Liu, A. (2012). Where is the cultural criticism in the Digital Humanities? In M.K. Gold (Ed.). *Debates in the Digital Humanities* (Vol. 1). University of Minnesota Press. https://doi.org/10.5749/9781452963754

Liu, A. (2013). The meaning of the Digital Humanities. *PMLA/Publications of the Modern Language Association of America 128* (2). https://doi.org/10.1632/pmla.2013.128.2.409

McClurken, J., Boggs, J., Wadewitz, A., Geller, E., & Beasley-Murray, J. (2013). Digital literacy and the undergraduate curriculum. In D.J. Cohen & T. Schienfeldt (Eds). *Hacking the Academy: New Approaches to Scholarship and Teaching from Digital Humanities.* University of Michigan Press. https://www.doi.org/10.3998/dh.12172434.0001.001

Moje, E.B., Ciechanowski, K.M., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly 39*(1), 38–70. https://doi.org/10.1598/RRQ.39.1.4

Moll, L.C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: using a qualitative approach to connect homes and classrooms. *Theory into Practice 31*(2), 132–141.

Munby, H. (1982). The place of teachers' belief in research on teacher thinking and decision making, and an alternative methodology. *Instructional Science 11*(3), 201–225. https://doi.org/10.1007/BF00414280

Murray, P.R., & Hand, C. (2015). Making culture: Locating the Digital Humanities in India. *Visible Language 49*(3), 140–155.

NCF. (2005). National Curriculum Framework. NCERT.

Noddings, N. (2005). Place-based education to preserve the Earth and its people. In N. Noddings (Ed.). *Educating Citizens for Global Awareness.* (pp. 57–68). Teachers College Press.

Nyhan, J., & Vanhoutte, E. (Eds). (2013). *Defining Digital Humanities. A Reader*. Ashgate Publishing.

O'Connell, K.M. (2008). Freedom, creativity, and leisure in education: Tagore in Canada, 1929. *University of Toronto Quarterly 77*(4), 980–991. https://doi.org/10.3138/UTQ.77.4.980

Pajares, F.M. (1992). Teacher's belief and educational research: Cleaning up a messy construct. *Review of Educational Research 62*(3), 307–322. https://doi.org/10.3102/00346543062003307

Ramachandran, V., Bhattarcharjea, S., & Sheshagiri, K.M. (2008). *Primary School Teachers: The Twists and Turns of Everyday Practice*. Educational Resource Unit.

Ramsay, S. (2010/2014). *The Hermeneutics of Screwing Around: Or What Do You Do with a Million Books*. (pp. 111–120). https://libraries.uh.edu/wp-content/uploads/Ramsay-The-Hermeneutics-of-Screwing-Around.pdf

Ramsay, S. (2013). On building. In *Defining Digital Humanities: A Reader* (pp. 243–245). Ashgate Publishing.

Ramsay, S., & Rockwell, G. (2012). Developing things: Notes toward an epistemology of building in the Digital Humanities. In M.K. Gold (Ed.). *Debates in the Digital Humanities* (Vol. 1). University of Minnesota Press. https://doi.org/10.5749/9781452963754

Rao, N., Cheng, K.M., & Narain, K. (2003). Schooling in China and India: Understanding how socio-contextual factors moderate the role of the State. *International Review of Education 49*(1/2), 153–176. https://doi.org/10.1023/A:1022969922200

Raths, J. (2001). Teachers' beliefs and teaching beliefs. *Early Childhood Research and Practice 3*(1), 1–10.

Rehbein, M., & Fritze, C. (2012). Hands-on teaching digital humanities: A didactic analysis of a summer school course on digital editing. In B.D. Hirsch (Ed.). *Digital Humanities Pedagogy: Practices, Principles and Politics.* (pp. 47–78). Open Book Publishers.

Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.). *Handbook of Research on Teacher Education.* (pp. 102–119). Macmillan.

Richardson, V. (2003). Preservice teachers' beliefs. In J. Raths & A.C. McAninch (Eds). *Teacher Beliefs and Classroom Performance: The Impact of Teacher Education*. Information Age Publishing.

Sanger, M.N., & Osguthorpe, R.D. (2011). Teacher education, preservice teacher beliefs, and the moral work of teaching. *Teaching and Teacher Education 27*(3), 569–578. https://doi.org/10.1016/j.tate.2010.10.011

Sarangapani, P.M. (1999). The child's construction of knowledge. In T. Saraswathi (Ed.). *Culture, Socialization and Human Development: Theory, Research and Applications in India.* (pp. 85–122). Sage Publications.

Sarangapani, P.M. (2003). *Constructing School Knowledge: An Ethnography of Learning in an Indian Village*. Sage Publications.

Schweisfurth, M. (2011). Learner-centred education in developing country contexts: From solution to problem? *International Journal of Educational Development 31*(5). https://doi.org/10.1016/j.ijedudev.2011.03.005

Schweisfurth, M. (2013). *Learner-centred Education in International Perspective: Whose Pedagogy for whose Development*? Routledge. https://doi.org/10.4324/9780203817438

Shanmugapriya, T., & Menon, N. (2020). Infrastructure and social interaction: Situated research practices in Digital Humanities in India. *Digital Humanities Quarterly 14*(3). http://digitalhumanities.org:8081/dhq/vol/14/3/000471/000471.html

Sidorkin, A.M. (2004). *In the event of learning: Alienation and participative thinking in education*. (Faculty Publications Paper 12, pp. 1–11). Rhode Island College. https://doi.org/10.1111/j.0013-2004.2004.00018.x

Sneha, P.P. (2016). *Mapping Digital Humanities in India: Vol. CIS Papers 2016.02*. The Centre for Internet and Society, India. https://cis-india.org/papers/mapping-digital-humanities-in-india

Svensson, P. (2010). The landscape of Digital Humanities. *Digital Humanities Quarterly 4*(1).

Tagore, R. (2009). *The Oxford India Tagore: Selected Writings on Education and Nationalism*. U. D. Gupta (Ed.). Oxford University Press.

Tatto, M.T. (1996). Examining values and beliefs about teaching diverse students: Understanding the challenge for teacher education. *Educational Evaluation and Policy Analysis 18*(2), 155–180. https://doi.org/10.3102/01623737018002155

Taylor, S. (2013). Collaborative approaches to the Digital in English Studies. *Computers and Composition 30*, 180–182. https://doi.org/10.1016/j.compcom.2013.06.003

Vavrus, F. (2009). The cultural politics of constructivist pedagogies: Teacher education reform in the United Republic of Tanzania. *International Journal of Educational Development 29*, 303–311. https://doi.org/10.1016/j.ijedudev.2008.05.002

Vygotsky, L.S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.