# THE ROLE OF FEMINIST STANDPOINT AND INTERSECTIONALITY

# **EPISTEMOLOGIES**

# IN PROVIDING INSIGHTS INTO THE CAUSES OF GENDER DISPARITY IN HIGHER EDUCATION

## **Enyonam Brigitte Norgbey**

Women's underrepresentation in higher education is a persistent issue of concern, particularly in sub-Saharan Africa, at a time when higher education plays a critical role in society's development and knowledge-based innovations are critical for development in a global economy. The gender gap in higher education is created by complex interconnected sets of deep-rooted factors. A clear understanding of the underlying causes of gender inequality in higher education is necessary to develop effective interventions to overcome this disparity. Feminist standpoint and feminist intersectionality epistemologies have been used to provide insights into gender disparities in higher education. Drawing on existing published literature, I will first discuss the conceptual and theoretical frameworks of these two feminist epistemologies and then explore the methodological implications of these epistemologies for critically examining gender disparities in higher education in the context of sub-Saharan Africa.

Keywords: epistemology, feminism, gender, higher education, intersectionality

La formation postsecondaire joue un rôle essentiel dans le développement des sociétés particulièrement dans le contexte actuel de la mondialisation, dans lequel les innovations fondées sur les connaissances sont essentielles pour assurer le développement des sociétés. Toutefois, en Afrique sub-saharienne, les femmes sont sous-représentées dans les formations postsecondaires, et cette réalité sociologique est préoccupante. L'écart entre le nombre d'hommes et de femmes en formation postsecondaire s'explique par un réseau complexe de facteurs représentationnels interreliés profondément ancré au sein de la société. Une bonne compréhension des causes expliquant la différence entre le nombre d'hommes et de femmes fréquentant une institution postsecondaire est nécessaire pour élaborer des mesures d'intervention efficaces et, ainsi, parvenir à dissiper cet écart entre le nombre d'hommes et de femmes qui s'inscrivent dans des programmes d'études postsecondaires en Afrique sub-saharienne. Dans le cadre des recherches menées jusqu'à présent à ce sujet, les concepts de féminisme et d'intersectionalité ont été employés pour tenter de proposer des pistes d'explication à cette situation contemporaine. Dans le cadre de cet article, nous nous appuyons sur les recherches publiées pour présenter les cadres théoriques et conceptuels de deux approches épistémologiques féministes et, par la suite, explorer les implications méthodologiques de ces deux approches épistémologiques dans le but d'analyser l'écart existant actuellement entre le nombre d'hommes et de femmes qui étudient au postsecondaire en Afrique sub-saharienne.

Mots-clés : épistémologie, féminisme, formation postsecondaire, genre, intersectionalité

Higher education plays a critical role in society's development, particularly in the current era of globalization in which knowledge-based innovations are critical for development (UNESCO, 2015; World Bank, 2014). However, there is a considerable gender gap in higher education particularly in sub-Saharan Africa with female enrollments often far below male enrollments (Morley, 2010). This is especially true in applied sciences, in contrast to higher female enrollment in university-level social science and humanities programs (Morley, Leach & Lugg, 2009; Schulze & van Heerden, 2015). For example, in Ghana, women's enrollment ratio in science and technology in 2010 was 28% as opposed to 72% for men (Atuahene & Owusu-Ansah, 2013). While there is ample evidence that higher education is inequitably distributed in favor of males (Atuahene & Owusu-Ansah, 2013), very little is understood about the impediments to women's enrollment in higher education.

There is a strong likelihood that gendered differences in enrollment rates reflect broader social inequities and gender-differentiated opportunity structures (Morley et al., 2009). This problem has worsened in sub-Saharan Africa by the scant research output on women in higher education and the limited access to information necessary to sensitize society to the challenges faced by women in accessing higher education opportunities. This, in turn, limits the efficacy of policies that purport to support female student enrollment in higher education (Effah, 2011; UNESCO, 2015).

Proponents of gender equality in higher education argue that addressing structural inequalities in universities requires a closer look at the gendered experiences and power relations within the institutions (Beddoes, 2012; Chikunda 2014; Molla & Cuthbert, 2014; Morley et al., 2009). Research needs to investigate the real multifaceted issues related to gender disparity, such as

patriarchy,<sup>1</sup> and the concealed social, political, and economic complexities that affect the lives of women. Such research is not only necessary to develop an understanding of the underlying factors of gender disparity in higher education, but to develop effective interventions to overcome this disparity.

Further, traditional research methods tend to "treat gender as a variable rather than a foundational hierarchy of society" (Beddoes, 2012, p. 208). Although many research methods' textbooks advocate that the research question guides the method(s) used in a study, Krane, Ross, Barak, Rowse, and Lucas-Carr (2012) find the issue a lot more complex. They argue that epistemology guides the types of questions researchers ask, which then provides a basis for the methodological stance and essentially ends with the selection of the study method(s) used (Krane et al., 2012). Epistemology guides methodological choices while justifying and evaluating knowledge (Carter & Little, 2007).

Many researchers have used feminist epistemologies and methodologies to gain a better understanding of the underlying causes of women's underrepresentation in higher education, and the suppression of women's voices in academia (Mama, 2011; Nadar 2014; Stone, 2007). Consistent across feminist perspectives, the literature describes feminist approaches as collaborative, reflexive, and non-hierarchical (Fonow & Cook, 1991). They emphasize the legitimacy of personal experience (Ferree & Hess, 1994) and recognize the multiplicity of women's experiences (Reinharz, 1992) while

\_

<sup>&</sup>lt;sup>1</sup>Patriarchy is an institutionalized societal structure that encourages males' domination over females. It puts the interest of men before those of women and uses culture, religion etc. to justify women's subordination (Dlamini & Adams, 2014).

encouraging collaboration between the researcher and the subjects under study (Collins, 1991).

Drawing on the literature, I will first discuss conceptual and theoretical frameworks of feminist standpoint and intersectionality epistemologies that are being used to gain better insights into the underlying causes of the underrepresentation of women in higher education. Then I will explore the methodological implications of these epistemologies for critically examining gender disparities in higher education in the context of sub-Saharan Africa.

## Feminist standpoint epistemology

Feminist standpoint epistemology emerged four decades ago and was developed in Western Europe, North America, and Australia (Stone, 2007) before reaching the developing nations shortly after (Okeke-Ihejirika, 2009). Feminist standpoint epistemology assumes that marginalized and oppressed people are in privileged positions to gain knowledge of the social realities related to their social positions (Anderson, 2015; Harding, 1986; Hartsock, 1983; Hesse-Biber, 2012). Further, feminist scholarship focuses on the ways gender affects the knower and the conception of knowledge while scrutinizing the way research is conducted and justified (Anderson, 2004; Collins, 1991; Crasnow, 2013).

The main argument supported by feminist epistemologists is that men's perceptions and practices of knowledge creation and justification consistently discriminate against women while women's perspectives are repeatedly stifled and subdued (Haraway, 1997; Harding, 1986; Hartstock, 1983). Feminist research primarily examines the life experiences of women while focusing on epistemologies that help bring women's voices into the gender debate. It strives

to improve practices aimed to serve the interests of the oppressed and the marginalized (Anderson, 2015; Harding, 1986; Hartsock, 1983, 1998).

Informed by Marxism², standpoint theory is based on historical materialism³ that generates a collective consciousness of one's subjugated position in a capitalist⁴ system. In the same way that workers under capitalism held "an epistemologically privileged position" (Neitz, 2014, p. 261) for understanding class domination, so too is women's collective consciousness and position privileged for understanding the root causes and consequences of the gender inequality (Hesse-Biber, 2012).

Feminist standpoint epistemology is a critical theory that seeks to empower oppressed women and bring about change. Consequently, researchers adopting a standpoint epistemology: (a) support the interests of the oppressed; (b) enable the oppressed to comprehend their issues; and (c) empower the oppressed to improve their conditions. These researchers apply feminist standpoint epistemology through three main tenets: *situated knowledge*, *epistemic advantage*, and *achievement* (Crasnow, 2013; Intemann, 2010; Rolin, 2009).

<sup>&</sup>lt;sup>2</sup>Marxism claims an epistemic privilege over fundamental questions of economics, sociology, and history on behalf of the standpoint of the proletariat (Neitz, 2014).

<sup>&</sup>lt;sup>3</sup>Historical materialism is the Marxist theory (adopted as the official philosophy of the Soviet communists) that political and historical events result from the conflict of social forces and are interpretable as a series of contradictions and their solutions. The conflict is believed to be caused by material needs. This was first articulated by Karl Marx (1818–1883). https://en.wikipedia.org/wiki/Historical\_materialism. Retrieved on October 31, 2017.

<sup>&</sup>lt;sup>4</sup>"Capitalism is often thought of as an economic system in which private actors own and control property in accord with their interests" (Jahan & Mahmud, 2015, p. 45).

The situated-knowledge tenet implies that the social position of the researcher impacts his or her experiences and determines the nature and the boundaries of knowledge constructed. This tenet emulates the position of the knowledge producer at a historical moment, within a culture, and in a specific location (Haraway, 1988; Harding, 1986). Situated-knowledge also means that "knowledge is achieved from a particular standpoint" (Intemann, 2010, p. 785). Standpoint is based on a critical collective consciousness developed through a critical evaluation of how power structures such as racism, patriarchy, and hegemony<sup>5</sup> affect or restrict research questions, methodological decisions, background assumptions, or data interpretation (Intemann, 2010).

The epistemic advantage tenet suggests that the inclusion of members of marginalized groups in research is likely to culminate in more rigorous and critical reflections given their contextual knowledge and experience (Rolin, 2009). This concept may be relevant if the knowledge claim is related to oppression or marginalization. Even then, all women who have been oppressed or marginalized would not necessarily have experienced the same type of oppression because location, context, and history also impact experience and, in turn, affect knowledge creation (Intemann, 2010; Naidu, 2010; Rolin, 2006).

The achievement tenet means that reaching the standpoint leads to potential emancipation and empowerment and prospective liberation from oppression (Intemann, 2010). The terms *emancipation* and *empowerment* relate to capacity development allowing women to become effective agents of their own transformation. They involve skills and knowledge that ordinarily focus on

<sup>&</sup>lt;sup>5</sup>Hegemony is a rule of one set of views and traditions over others. Hegemony is brought about by political, ideological, discursive, and representational measures (Akita, 2010).

economic, psychological, cognitive, and political dimensions (DeJaeghere & Wiger, 2013; Ross, Shah, & Wang, 2011; Stromquist, 2006).

Further, feminist standpoint epistemology advocates for women's emancipation with a more radical notion of liberation from patriarchy (Evans & Chamberlain, 2015). Beddoes and Borrego (2011) posit that patriarchal relations do exist in higher education institutions, especially in applied science programs. However, Collins (1991), and Evans and Chamberlain argue that feminist activism for women's liberation from oppressive gendered double standards is more exclusive because the perspectives of Black feminists are ignored and excluded from mainstream academic debates while some other feminists' perspectives are universalized.

Collins (1991) has been very instrumental in shaping the worldview of Black feminists, especially the view of African-American and developing nations' women (Chilisa & Ntseane, 2010; Machira, 2013; Nadar, 2014; Naidu, 2010). Black feminists' standpoint epistemology thus provides a practical lens to help recognize degrading, disheartening, and restraining lived-experiences that become sources of inspiration and empowerment (Bailey, 2014; Collins, 2000; Dotson, 2015; Gines, 2015; Mama, 2011). Even though feminist standpoint epistemology provides a relevant tool for examining oppressed and marginalized groups in higher education, it is limited to gender issues alone. A robust feminist epistemology such as intersectionality is useful for examining other sources of discrimination that do not promote equal opportunities in educational settings.

### Feminist intersectionality epistemology

As Black feminist scholars start writing about women's issues, they quickly realize that the Black feminist standpoint epistemology, which mostly focused on gender issues, did not address race, ethnicity, social status, nationality, etc., as oppressive forces (Hesse-Biber, 2012). In the 1990s, young feminists became vocal through publications of articles, books, and debates supported by global movements demanded the inclusion of other issues like race, ethnicity, class, etc. that intersect with gender and contribute to women's oppression (Dean & Aune, 2015). To understand how multiple social identities such as gender, ethnicity, social class, nationality, etc. interact and intersect, the concept of *intersectionality* becomes imperative (Dill & Kohlman, 2012).

Black feminist scholars describe intersectionality as a compound system by which people's race, class, gender, etc. oftentimes place them in a lower social status (Crenshaw, 1989). 'Intersectionality' denotes the interaction between gender, social status, and other types of differences in individual lives, social practices, institutional arrangements, and cultural ideologies, and the results of these interactions in terms of power relations (Berger & Guidroz, 2009; Davis, 2008; Dill & Kohlman, 2012; Sang, 2016). Davis (2008) argues that "intersectionality promises an almost universal applicability, useful for understanding and analyzing any social practice, and any cultural configuration" (p. 72). Sang (2016) corroborates that the experience of women in a learning environment is "bound by cultural and temporal contexts" (p. 2). The strength of the feminist intersectional approach to understanding and developing effective policies to challenge disparities in higher education depends on the ways this epistemological approach contrasts with dominant educational paradigms (Sang, 2016; Walby, Armstrong, & Strid, 2012). While

feminist epistemology provides an appropriate lens for studying gender issues, there is a need to select appropriate methodologies to create knowledge. Epistemology influences methodological choice, while methodology affects and is defined by research objectives, questions, and study design (Carter & Little, 2007).

### Methodological implications for sub-Saharan Africa

In sub-Saharan Africa, higher education is regarded as a mechanism that has the potential to bring about social transformation, development, and progress while reducing poverty (Mkude, 2011). However, women and girls have been marginalized due to unequal educational opportunities (Chauraya, 2014). Generally, the female child's educational opportunities tend to be regulated by patriarchal perspectives of gender roles resulting in some parents attaching more importance to the education of boys than girls (Machira, 2013). Gender roles provide unique perspectives of social interpretations of girls' and boys' education as well as adolescents' personal aspirations (Morley, 2010). These norms and values deeply implanted in the fabric of the African society generally guide higher education practices (Okeke-Ihejirika, 2009). Research is thus necessary to unveil these factors that are root causes of gender disparity in higher education. If patriarchy contributes to gender disparity in higher education then the fact that sub-Saharan Africa includes many countries with various cultural, tribal, and political practices, the feminist standpoint epistemology alone cannot provide an adequate lens to examine patriarchal underpinning or to advocate for change.

The goal of the feminist research is traditionally to address gender inequality while emphasizing the problems of power and authority. However, a closer look at how power and prejudice are revealed through research

epistemologies and methodologies is important (Beddoes, 2013). Feminist research methodologies offer a unique set of concepts to negotiate the weaknesses and prejudices of classic positivist research while focusing on inclusiveness and diversity; social context and historical context and addressing issues of power imbalances (Beckman, 2014). For example, Sang (2016) demonstrates how the lens of intersectionality helped illuminate the heterogeneity of women's experiences in academia. The feminist methodology highlights personal experiences and accepts the variety of women's experiences while encouraging the collaboration between the researcher and the subjects under study (Krane et al., 2012). Feminist methodology guided by intersectionality holds the possibility of challenging deeply held cultural, economic, historical and social assumptions, and layers of power rooted in gendered relations (Haynes, 2016).

#### **Conclusion**

Gender inequality in higher education is created by complex interconnected sets of ingrained factors. Feminist epistemologies have been very instrumental in the debates aiming to get to the root causes of gender disparity in higher education and advocating for change. I presented a brief overview of feminist standpoint and feminist intersectionality's perspectives. While feminist standpoint is effective in tackling gender issues, feminist intersectionality's lens provides a robust theoretical framework to investigate other social practices that intersect and interact with gender, particularly, in the higher educational sector in the sub-Saharan African context.

#### References

- Akita, E. M. (2010). *Hegemony, patriarchy, and human rights: The representation of Ghanaian women in politics (Ph.D.)*. Ohio University, OH. Retrieved from <a href="http://search.proquest.com.proxy.bib.uottawa.ca/pqdtglobal/docview/746480348/abstract/8967DC22A7AD4680PQ/1 on June 30, 2017.">http://search.proquest.com.proxy.bib.uottawa.ca/pqdtglobal/docview/746480348/abstract/8967DC22A7AD4680PQ/1 on June 30, 2017.</a>
- Anderson, E. (2004). Uses of value judgments in science: A general argument, with lessons from a case study of feminist research on divorce. *Hypatia*, 19(1), 1-24.
- Anderson, E. (2015). Feminist epistemology and philosophy of science. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Fall 2015).
- Atuahene, F. & Owusu-Ansah, A. (2013). A descriptive assessment of higher education access, participation, equity, and disparity in Ghana. Sage, 1(16). doi: 10.1177/2158244013497725.
- Bailey, A. (2014). The 'unlively' knowing field: An engagement with Dotson's third-order epistemic oppression. *Social Epistemology Review and Reply Collective*, *3*(10), 62-68.
- Beckman, L. J. (2014). Training in feminist research methodology: Doing research on the margins. *Women & Therapy, 37*, 164-177.
- Beddoes, K., & Borrego, M. (2011). Feminist theory in three engineering education journals: 1995-2008. *Journal of Engineering Education*, *100*(2), 281-303.

- Beddoes, K. (2012). Feminist scholarship in engineering education: Challenges and tensions. *Engineering Studies*, *4*(3), 205-232.
- Beddoes, K. (2013). Feminist methodologies and engineering education research. *European Journal of Engineering Education*, 38(1), 107–118.
- Berger, M. T., & Guidroz, K. (2009). *The intersectional approach: Transforming the academy through race, class, and gender.* Chapel Hill: University of North Carolina Press.
- Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research*, *17*(10), 1316-1328.
- Chauraya, E. (2014). Access or inclusion? Conceptualisation and operalisation of gender equality in Zimbabwean state universities. *Perspectives in Education*, 32(4), 4-19.
- Chikunda, C. (2014). Identifying tensions around gender-responsive curriculum practices in science teacher education in Zimbabwe: An activity theory analysis. *African Journal of Research in Mathematics, Science and Technology Education*, 18(3), 264-275.
- Chilisa, B., & Ntseane, G. (2010). Resisting dominant discourses: Implications of indigenous African feminist theory and methods for gender and education research. *Gender and Education*, *22*(6), 617-632.
- Collins, P. H. (1991). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York, NY: Routledge.

- Collins, P. H. (2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment.* (pp. 335). New York, NY: Routledge.
- Crasnow, S. (2013). Feminist philosophy of science: Values and objectivity. *Philosophy Compass*, 8(4), 413-423.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics, *University of Chicago Legal Forum*, *4*, 139-167.
- Davis, S. (2008). Intersectionality as buzzword: Sociology of science perspective on what makes a feminist theory successful. *Feminist Theory*, *9*(1), 67-85.
- Dean, J., & Aune, K. (2015). Feminism resurgent? Mapping contemporary feminist activisms in Europe. *Social Movement Studies*, *14*(4), 375-395.
- DeJaeghere, J., & Wiger, N. P. (2013). Gender discourses in an NGO education project: Openings for transformation toward gender equality in Bangladesh. *International Journal of Educational Development*, *33*, 557-565.
- Dill, B. T., & Kohlman, M. H. (2012). Intersectionality: A transformative paradigm in feminist theory and social justice. In S. N. Hesse-Biber, (2nd ed.) *The Handbook of Feminist Research: Theory and Praxis*, (pp. 154-174). Thousand Oaks, CA: Sage Publications Inc.
- Dlamini, E. T., & Adams, J. D. (2014). Patriarchy: A case of women in institutions of higher education. *Perspectives in Education*, *32*(4), 121-133.
- Dotson, K. (2015). Inheriting Patricia Hill Collins's Black feminist epistemology. *Ethnic and Racial Studies, 38*(13), 2322-2328.

- Effah, P. (2011). A Ghanaian response to the study on "widening participation in higher education in Ghana and Tanzania: Developing an equity scorecard." *Research in Competitive and International Education*, 6(4), 374-382.
- Evans, E., & Chamberlain, P. (2015). Critical waves: Exploring feminist identity, discourse, and praxis in western feminism. *Social Movement Studies, 14*(4), 396-409.
- Ferree, M. M., & Hess, B. (1994). *Controversy and coalition: The new feminist movement across three decades of change* (rev. ed.). New York, NY: Twayne.
- Fonow, M. M., & Cook, J. A. (1991). Back to the future: A look at the second wave of feminist epistemology and methodology. In M. M. Fonow & J. A. Cook (Eds.), *Beyond methodology: Feminist scholarship as lived research* (pp. 1–15). Bloomington, IN: Indiana University Press.
- Gines, K. (2015). Ruminations on twenty-five years of Patricia Hill Collins's Black feminist thought: Knowledge, consciousness and the politics of empowerment. *Ethnic and Racial Studies*, *38*(13), 2341-2348.
- Haraway, D. J. (1988). Situated knowledge: The science question in feminism and the issue of partial perspectives. *Feminist Studies*, *14*(4), 575-599.
- Haraway, D. J. (1997). *Modest\_witness@second\_millennium:*Femaleman\_meets\_oncomouse. Feminism and technoscience. New York, N.Y.:

  Routledge.
- Harding, S. (1986). *The science question in feminism*. Ithaca, N.Y.: Cornell University Press.

- Hartsock, N. (1983). The feminist standpoint: Developing the ground for a specifically feminist historical materialism. In S. Harding (Eds.). *The feminist standpoint theory reader*. New York, NY: Routledge.
- Haynes, K. (2016). Accounting as gendering and gendered: A review of 25 years of critical accounting research on gender. *Critical Perspectives on Accounting,* 0(0), 1-15.
- Hesse-Biber, S. N. (2012). *The handbook of feminist research: Theory and praxis* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Intemann, K. (2010). 25 Years of feminist empiricism and standpoint theory: Where are we now? *Hypatia*, *25*(4), 778-796.
- Jahan, S., & Mahmud, A. S. (2015). Back to the basics: What is capitalism? *Finance & Development*, *52*(2), 45.
- Krane, V., Ross, R. S., Barak, K. S., Rowse, J. L., & Luca Carr, C. B. (2012). Unpacking our academic suitcases: The inner workings of our feminist research group. *Quest*, *4*, 249-267.
- Machira, M. A. (2013). *The experience of patriarchy by Kenyan women in the pursuit of higher education.* ProQuest LLC. 789 East Eisenhower Parkway. Retrieved on June 30, 2017.
  - http://search.proquest.com.proxy.bib.uottawa.ca/eric/docview/1697502107/E44C17039D53413BPQ/11.
- Mama, A. (2011). What does it mean to do feminist research in African contexts? *Feminist Review*, 0141-7789/11, doi:10.1057/fr.2011.22.

- Mkude, D. (2011). Higher education as an instrument of social integration in Tanzania: Challenges and prospects. *Research in Comparative and International Education*, 6(4), 366-373.
- Molla, T. & Cuthbert, D. (2014). Qualitative inequality: Experiences of women in Ethiopian higher education. *Gender and Education*, *30*, 1-17
- Morley, L. (2010). Gender mainstreaming: Myths and measurement in higher education in Ghana and Tanzania. *Compare, 40*(4), 533-550.
- Morley, L., Leach, F., & Lugg, R. (2009). Democratising higher education in Ghana and Tanzania: Opportunity structures and social inequalities.

  International Journal of Educational Development, 29(1), 56-64.
- Nadar, S. (2014). *Stories are data with soul: Lessons from Black feminist epistemology*, 28, 18-28.
- Naidu, M. (2010). Wrestling with standpoint theory: Some thoughts on standpoint and African feminism. *Agenda*, *24*(83), 24-35.
- Neitz, M. J. (2014). Doing advocacy from a feminist standpoint. *Religion, 44*(2), 259-275.
- Okeke-Ihejirika, P. (2009). Gender Equity in African tertiary education systems: A critical look at women's progress. In M., Ndulo, & M. Grieco, *Power, Gender and Social Change in africa*. (pp. 207-229). Newcastle upon Tyne, England: Scholars Publishing.
- Reinharz, S. (1992). *Feminist methods in social research.* New York, NY: Oxford University Press.

- Rolin, K. (2006). The bias paradox in feminist standpoint epistemology. *Episteme* 1(2), 125-136.
- Rolin, K. (2009). Standpoint theory as a methodology for the study of power relations. *Hypatia: A Journal of Feminist Philosophy, 24*(4), 218-226.
- Ross, H., Shah, P., & Wang, L. (2011). Situating empowerment for millennial school girls in Gujarat, India, and Shaanxi, China. In: J., DeJaeghere, & F. Vavrus (eds.), *Special Issue of Feminist Formations* 23(3), 23-47.
- Sang, K. J. C. (2016). Gender, ethnicity, and feminism: An intersectional analysis of the lived experiences feminist academic women in UK higher education. *Journal of Gender Studies*, 1-16.
- Schulze, S., & van Heerden, M. (2015). Learning environments matter: Identifying on the motivation to learn science. *South African Journal of Education*, *35*(2), 1-9.
- Stone, A. (2007). *An introduction to feminist philosophy*. Cambridge, England: Polity.
- Stromquist, N. (2006). Gender, education and the possibility of transformative knowledge. *Compare: A Journal of Comparative and International Education,* 36(2), 145-161.
- UNESCO (2015). *Country profile: Gross enrollment tertiary education*. Retrieved on June 29, 2017 from

http://www.uis.unesco.org/DataCentre/Pages/country-profile.aspx?code=GHA&regioncode=40540.

Walby, S., Armstrong, J., & Strid, S. (2012). Intersectionality: Multiple inequalities in social theory. *Sociology*, 46(2), 224-240.

World Bank (2014). *Science, Technology, and Skills for Africa's Development*.

Retrieved from: <a href="https://olc.worldbank.org/content/science-technology-and-skills-africas-development">https://olc.worldbank.org/content/science-technology-and-skills-africas-development</a>, <a href="December 17">December 17</a>, <a href="2016">2016</a>.