

Taking the Bull by the Horns: A Mauritian Qualitative Study of the Doctoral Training in French Studies

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Abstract

Extant literature reveals that reports of the experiences of humanities doctoral students are relatively rare. In view of examining whether there is a need to review the traditional French studies doctoral training into the New-route PhD to reboot and reinvigorate the field, an inventory of how doctorates were and are still trained was conducted in 2019. An informal interview with five PhD holders, who have completed their PhD in the same field at different universities in France and Mauritius, was done. Two main themes were manually coded during data collection: research community, and doctoral training and career guidance. Despite major amendments over the centuries, the doctoral training for candidates enrolled in this PhD in both France and Mauritius still lags behind and is often accused of being completely irrelevant in solving social issues. In this empirical study, the focus group has enabled us to investigate the support doctoral students have received in order to make learning leaps and develop research and technical skills which can benefit them in or outside academia. Despite the resilience of all respondents to complete their PhD (French studies), it seems that some changes are needed in the field. The role of the university and Education 4.0 is not to simply produce and disseminate knowledge but must also prepare the student to face the labour market and to enable the doctoral candidate achieve what is called “doctorateness”, participate in (inter)-national research community and use advanced technology such as programming languages/artificial intelligence/metaverse/virtual reality among others.

Keywords: Higher Education 4.0, doctoral training, French studies, technology, Mauritius.

1. Introduction

[...] we’re seeing a lot of public scepticism about the worth of the humanities in the context of our current social, economic and political lives. (cited in Bosworth, 2016, para. 4)

The above words of William Adams, Chair of the National Endowment for the Humanities, appear to ring warning bells. Is this the death of the humanities, as predicted by so many (Andrews, 2015)? Are the humanities an obsolete discipline, and

should we stop enrolling students in this field? The PhD in French studies (doctorat ès lettres) was first introduced in France in March 1808 (Places, 1969). Despite major amendments over the centuries, the doctoral training (which includes doctoral supervision) for candidates enrolled in this PhD in both France and Mauritius still lags behind and is often accused of being completely irrelevant in solving social issues (Turin, 2018). Few studies have been conducted on doctoral training in French studies. Therefore, in 2019, a focus group was used to gather the responses of five PhD holders, who have completed their PhD in the same field at different universities in France and Mauritius. In view of examining whether there is a need to revamp the traditional French studies doctoral training into the New-route PhD (Stellenbosch University, 2018) to reboot and reinvigorate the field, an inventory of how doctorates were and are still trained was conducted in an informal interview. Two main themes were manually coded during data collection: research community, and doctoral training and career guidance.

A quick overview of the public education system in Mauritius is needed to understand the place of French language/literature in the Mauritian context. Both French and English languages are compulsory from primary schools onwards; and while students have to take a compulsory English paper, known as General Paper, for their Cambridge Higher School Certificate (A-level), French language is mandatory only till the Cambridge School Certificate (O-level). French literature is not compulsory and the uptake is quite low compared to that of French language: 3456 students out of 18503 (18.7%) were enrolled in French literature in the 2020 Statistics. For the A-Levels, students must take five subjects. Three of them are considered core or main subjects, while two, including the compulsory General Paper, are considered subsidiary subjects. Out of 9560 students, 2337 took French as a core subject (24.4%) and 5058 students chose French as a subsidiary subject (52.9%) (Statistics-Mauritius, 2020). Furthermore, figures from 2020-2021 show that, in the public universities of Mauritius, about 1514 students were enrolled in the social sciences and humanities. The estimated total number of students enrolled in public and private universities in Mauritius and overseas are 238 in the humanities and 1332 in languages (Statistics-Mauritius, 2020). With the exception of the Open University of Mauritius (with 196 students enrolled in an undergraduate degree in French), no studies have been found into enrolment in French studies in the higher education in Mauritius. Data collected by Statistics Mauritius tend to merge the Social Sciences and the Humanities, and little data by specific field exists. Statistics also show how few social sciences/humanities graduates go on to study higher degrees, a decline that is often reported to be linked to the lack of job prospects (McGill-University, 2013). Academic positions for PhD candidates are also quite rare (McAlpine & Austin, 2018). Most developing countries prioritise STEM subjects (science, technology, engineering, Maths) over social science/humanities with the danger that literature, as argued by Robert Scholes, “has lost its aura” in the “age of mass media” (English, 2012, p. 6).

2. Theoretical Perspectives: A Brief Overview Crisis in the humanities

Burying one’s head in the sand and ignoring the situation which seems to prevail in the field of the humanities will not solve the problems. In her discussion on the lack

of importance given to comparative studies, Gayatri Spivak posits that it is high time to “renovate” the field (Spivak, 2003, p. 1). Indeed, to prevent the obliteration of the field, this “disciplinary fear” (Spivak, 2003, p. 19) felt by both the social sciences and the humanities has to be tackled. Linda Hutcheon argues that an interdisciplinary approach must be taken into consideration (Hutcheon, 2013), thus supporting Spivak, who also sustains that “focused discussion” (Spivak, 2003, p. 19) is crucial “as the boundaries of disciplinary knowledge are being redrawn” (Spivak, 2003, p. 19).

Indeed, this drain in the humanities dates since the 17th century and the main cause given was underemployment and even today, the same uncertainty prevails about the outcome for students with degrees in literatures or the humanities (Yachnin, 2016). However, even if the solution is not to cut programs, it is important to reform doctoral training in the humanities, “so that it leads to a multiplicity of career paths instead of only one” (McGill-University, 2013, p. 1).

Doctoral Training

Citing the 2005-statistics from the Higher Education Funding Council for England (HEFCE), Clare Saunders posits that doctoral completion rates in the arts and the humanities are lower than other fields (Saunders, 2009). In fact, doctoral students are not prepared to face “the complexity and intensity inherent in the doctoral process” (Brause, 2000, p. xi), and drawing from one’s “earlier collegiate experiences” (Brause, 2000, p. xi) does not guarantee success. Research has shown that good quality supervision, social support, including constructive feedback, emotional support, “open, honest, and ongoing discussion” (Peltonen, Vekkaila, Rautio, Haverinen, & Pyhältö, 2017, p. 158) between the supervisor and the doctoral candidate is one of the main factors for the successful completion of doctoral studies. By also introducing the doctoral candidate to a researcher community or network, a positive relationship is built since support and a sense of belonging reduces the drop-out risk (Peltonen, Vekkaila, Rautio, Haverinen, & Pyhältö, 2017).

In addition to this, with the reduction of academic tenure positions, doctoral candidates have to be trained to face the job market. Many European universities have reviewed their doctoral training, by acquainting their doctoral candidates with the business sector, or introducing transferable skills training such as communication and presentation skills, advanced IT skills, teacher training modules and other academic, technical and intellectual competencies, which can enhance career opportunities outside academia (League of European Research Universities, 2007). In many French universities, doctoral candidates are invited to attend the “Doctoriales”, seminars of about one week, where doctoral candidates are invited to present their research in front of academics and companies.

It is to be noted that in many European countries there have been many pressures to make doctoral training “more relevant to a variety of other careers” (Cruz-Castro & Sanz-Menéndez, 2005, p. 11). By going beyond the limited research-focused or traditional doctorate and by developing the professional skills of doctoral candidates, universities will thus give them a better chance of securing a job in or outside academia.

Higher Education 4.0

All socio-economic changes have an impact on the education system. Transition from education 1.0 to 4.0 and the components of education 4.0 are clearly explored in Miranda, et al. (2021). This section will, therefore, reflect upon Education 4.0. With the fourth Industrial Revolution, the focus in the teaching-learning paradigm is mainly on more “dynamic” and advanced “technology-based tools and resources” (Velinova-Sokolova, 2022, p. 231). Moving away from the traditional way of teaching-learning, Education 4.0 tends to put emphasis on personalised learning: learners can work remotely and at their own pace (Velinova-Sokolova, 2022). Project-based learning is also one of the main highlights of Education 4.0, where learners not only delve into their subject matter, but develop the much-needed 21st century skills such as collaboration, communication, and critical thinking among others (Velinova-Sokolova, 2022). The learner’s voice is also a major element in Education 4.0. Indeed, the learner’s role is not only to give “feedback” on the university/class/lecturers, but s/he is also responsible for “the design of their learning” (Williams, Windle, & Wharrad, 2020, p. 8).

The question that is raised is whether the education system (from primary to tertiary levels) of developing countries have adjusted to the demands of Industry 4.0 and can boast of attaining Education 4.0. Since this study’s aim is to analyse the doctoral training of holders of French studies, emphasis will be on Higher Education 4.0. In France, since 2016, a national framework was set up for the delivery of the doctoral degree, and all those enrolled in a PhD submit not only their thesis but must also follow compulsory training in their field of specialisation, in research ethics and integrity and other interdisciplinary or transversal fields such as communication skills, critical thinking, scientific writing among others (Schöpfel, Prost, Jacquemin, & Kergosien, 2019; Ministère de l’éducation nationale, de l’enseignement supérieur et de la recherche, 2016).

However, another query that is brought up is the huge amount of data and courses available, and the difficulties faced by learners to decide on the different courses that would be useful to them. In fact, language/literary candidates are rarely presented with emerging technologies tools such as Virtual Reality, Machine Learning. Artificial Intelligence among others. And if programming or computational courses are available, very few might embark on those courses they might think too demanding, technical or difficult to grasp. Sung, Leong, & Cunningham (2020) suggest that educators/researchers must work together with technologists; and this, indeed, might bring in new and innovative ideas and broaden the skills of everyone.

More crucial also is the creation of a research culture in the country. To reduce the tendency of PhD candidates and researchers to work in solo, the integration of a national metaverse platform can be useful. A universe built upon a “multisensory immersive technology referred to as extended reality (XR), and [which] includes virtual reality (VR), augmented reality (AR), and mixed reality (MR)” (Teng, Cai, Gao, Zhang, & Li, 2022, p. 2) can generate “an immersive online experience” (Contreras, González, Fernández, Cepa, & Escobar, 2022, p. 34) and can be of benefit to the whole community. PhD candidates can create their avatars and become more active in their research by living, working, discussing, and collaborating digitally.

3. Research Methodology

In this qualitative research, data has been collected from a focus group of five respondents, which has made it possible to draw certain inferences. Respondents could answer in either English or French. Any answers from the open-ended questions that were given in French were rephrased and translated. This study can be considered as linked case studies in order to initially grasp the challenges faced by those enrolled in French studies. Case studies seemed to be the best methodological approach as “an empirical investigation” (Hancock & Algozzine, 2006), it reflects the purpose of this observational and exploratory study, which is to collect and identify the trend of PhD supervision and the experiences of those with a PhD in French studies. Some of the topics explored in the informal interviews were supervision styles, overall experience of the doctoral period, skills and competencies acquired; and job opportunities.

4. Findings and Discussions

Out of the five people interviewed, Respondent 2 completed a PhD in French studies in Mauritius, Respondent 3 was on a joint doctoral programme with universities in Mauritius and France and the three others were enrolled in different universities in France. At the time of the interview, all respondents had completed their studies within the past six years with the exception of respondent 4 who finished his in 2002. Respondents 1 and 3 are teaching in universities in Mauritius and the others are secondary school teachers. In order to analyse the experience of those enrolled in PhD French studies, we have focussed on two main recurrent themes, namely research community, and doctoral training and career-guidance.

Research Community

Both personal and programmatic factors often lead to drop-outs of doctoral candidates. Factors directly related to the students and their personal lives can rarely be solved by the faculties; however, other factors related to the design and structure of the doctoral programmes can and must be taken into consideration. Feelings of isolation, and lack of support from the supervisor and/or the faculty or research community is often cited as being the main reasons of dropouts (Brause, 2000).

All of the respondents undertook their doctorates by distance learning and only Respondent 1 attended the campus-based training that was offered. Respondent 1 found that the university, and especially the supervisor offered support in the form of encouragement and also by funding the travel expense for one conference. However, it is only when the student expressed an interest in publication that the supervisor offered advice. Interestingly, this student noted that the supervisor insisted that it is the role of the students to come forward if they need support. Respondent 2 also had a positive experience with her supervisor. Before enrolment, the supervisor advised the candidate by proposing a theme related to Mauritius; during the PhD, there was constant proofreading; and after the PhD, the candidate is often invited to conferences. For Respondent 3, the supervisor was there to raise critical reflection and to draw attention to the broader issues across the thesis document. This minimal support from the supervisor seems to have satisfied the respondents. However, Respondent 4, who

also chose his supervisor, found that although his supervisor encouraged him and had a lot of confidence in his thesis topic before he enrolled, he did not receive any support during his PhD and had to work alone: there was no follow-up of the thesis, and he did not receive any official, timely or constructive feedback on his progress, and neither did he get the opportunity to join a research group. After the PhD, there was no assistance to integrate academia. According to Respondent 4, there are some recent changes in the infrastructure; however, supervisors who devote their time by re-reading the thesis, advising the doctoral candidate and supporting them into academia and research labs are rare. For Respondent 4, the quality of the teaching of the lecturers was poor, the quality of the research experience was neutral, and the intellectual liveliness of the program poor.

All of the respondents admit being on their own during their PhD. However, when asked if they had ever felt like dropping out of their doctoral programme, all of them replied negatively. It seems that those enrolled in PhD (French studies) have always learnt to work independently and in solo. For Respondent 3, this individualistic work has enabled her to sharpen her curiosity and shape her independent way of thinking. Citing various authors, McAlpine and Austin (2018) posit that the field of humanities is “conceived” (p. 2) differently from that of the sciences and social sciences. The “signature PhD pedagogies” of this field are mainly constructed on a “long tradition of individualism” (McAlpine & Austin, 2018, p. 2). Indeed, PhD candidates in the humanities evolve in a “solitary scholarship”, where they are encouraged to only grasp “the “canon” in order to teach, the opportunity and flexibility to choose one’s own project, and independence as a researcher in undertaking the thesis (Jones, 2008; Golde, 2005)” (McAlpine & Austin, 2018, p. 2).

As argued in research on doctoral supervision, “the first – and often most influential – external factor that affects doctoral students’ experiences in graduate school is their relationship with their supervisor(s)” and it is claimed that supervisors play an active role in “student satisfaction, persistence, and academic achievement” (Sverdlik, Hall, McAlpine, & Hubbard, 2018, p. 369). The New-Route PhD, with an integration of a research community, seems to be the answer to the dissatisfaction faced in doctoral supervision. It is true that Hans Agné and Ulf Mörkenstam argue that collective supervision has some drawbacks on first year doctoral students such as discomfort in being coached in a group or being engaged in discussions with supervisors who are not specialists in the field and it has little or no effect on time completion (Agné & Mörkenstam, 2018); however, even if learning styles differ from one person/field to another, research has shown that a collectivistic approach can bring some advantages. Socialisation, for instance, is considered crucial as it leads to “knowledge exchange” (Bednall, 2018, para. 7), “strong connections with peers” (Bednall, 2018, para. 9), inclusion and support, and it gives clear understanding of the nature of graduate education (Ali & Kohun, 2006). Working in research groups matters, and according to some statistics, about 75% of the students who worked in a group were more satisfied with their supervision and doctoral studies compared to those working alone (Pyhältö, 2012). Collaborative groups also increase regional networking opportunities, thus relieving the sense of isolation experienced by many doctoral students (Saunders, 2009).

Hence, it seems that there is a dire need to review practices of supervisors in order to support and assess students' learning. A scientific community, even an online one, within the faculty or the university can motivate PhD candidates, since many of them are enrolled on a part-time or distance-learning basis. This networking opportunity will push doctoral candidates towards collaborative, team-based research, not only within the academic sector but beyond non-academic fields (McGill-University, 2013). This will also reduce the lonely researcher syndrome or the sense of isolation – where the doctoral candidate feels left behind or feels overwhelmed due to lack of communication and support.

Doctoral training and Career-guidance

Apart from Respondent 1, who received some generic training in oral communication, academic writing and preparing a Curriculum Vitae, it is to be noted that no respondents received any training in writing proposals for funding/grants, preparing articles for publication, and in writing the research methodology, the literature review or the PhD thesis. All respondents finished their PhD between three to seven years – but only Respondent 1, who took about four years, thought that she would have finished earlier if she had received better coaching during her PhD. According to Clare Saunders, despite the importance given to doctoral training, the support which is given is too “generic in nature” (Saunders, 2009, p. 45) and is not “tailored to the student's particular field(s) of study” (Saunders, 2009, p. 45). When focused on the candidate's field, the additional benefit is that it increases the candidates' research network (Saunders, 2009). However, cross-disciplinary training can also benefit doctoral candidates, in creating new contacts or in finding new research ideas.

In fact, a lack of training in the arts and humanities has often been explained by the fact that research in this field “does not follow a linear path or adopt a predetermined topic or methodology” (Saunders, 2009, p. 46). Indeed, “research methods are frequently underdetermined, contested and in flux” (Saunders, 2009, p. 46), thus making it impossible to come up with a “core ‘research training programme’ which will be appropriate for all (or even most) researchers in arts and humanities disciplines” (Saunders, 2009, p. 46). This point of view can once again be contradicted since it could be helpful to introduce the different research methods in literary studies such as archival research methods or textual analysis used by researchers in their works. The doctoral candidate is often left on his own to discover the methods used.

Moreover, all the respondents did not have any access to career guidance. Respondent 2 had an opportunity to obtain some teaching experience by teaching a few modules based on literature (“Introduction to literature: tales, myths and legends”, translated from French); but since it was not a tenure-track position, the PhD candidate had to find a job in a secondary school. Respondents 1 and 3 were already working in tertiary education, whereas the others had to seek secondary school jobs with no opportunity to lecture in universities.

Little research has been done on the employment prospects of humanities doctoral candidates. According to a research work in Canada, only about 20%-30% who finish their PhD secure positions in colleges and universities (McGill-University, 2013). Can we, therefore, deduce that higher education does not prepare students neither for academic practice nor for the non-academic jobs? Research in Canada and the European Union also reveals that there is a higher rate of unemployment, and of employment on short or fixed term contracts, with slightly below-average median earnings amongst arts and humanities graduates than their peers in other subject areas (McAlpine & Austin, 2018). Universities, therefore, have to rethink their programmes and help students plan their career (McAlpine & Austin, 2018). Indeed, a framework such as the “Vitae Researcher Development Framework” (Vitae, 2011) can be developed for researchers in order to enhance the quality of the doctorate in Mauritius.

In short, it seems that the humanities, particularly the literary studies and the arts, always have to have to justify their value and legitimacy *vis-à-vis* the more practical or useful fields (Cobb, 2010). Candidates with a PhD in French studies acquire many competences, and develop critical thinking and analytical skills. They focus on different aspects of culture, race, gender, and develop many skills and qualities such as empathy, all important in a multicultural and globalised world (Spencer, 2014). Doctoral candidates in the field must therefore be provided with practical, subject-specific support for sharpening skills in not only researching, writing, presenting and publishing, but also in ICT tools and programming languages. Cross-disciplinary training can further develop their transferable skills, which can add to their employability. Just like in all other fields, there seem to be many more PhD graduates than academic positions. Since, most of the graduates will end up finding their careers outside the academy, doctoral candidates have to be trained, and universities must also build partnerships or links with business and industry in order to facilitate the employability of their doctoral candidates. Various seminars in communication, public relations, programming tools, or graphics and design can open other doors in the human resource and ICT sectors for doctoral candidates in French and increase their visibility outside academia. Cross-disciplinary research will indeed give more value to the field of research.

As illustrated in Figure 1 below, a national Virtual Reality/Metaverse Platform can also be created to reach Education 4.0 goals, and create a more innovative research environment that would enable Facilitators/Educators and Technologists to collaborate, thus motivating PhD candidates, and overcoming some of the challenges faced by many (such as funding, administrative resistance...).

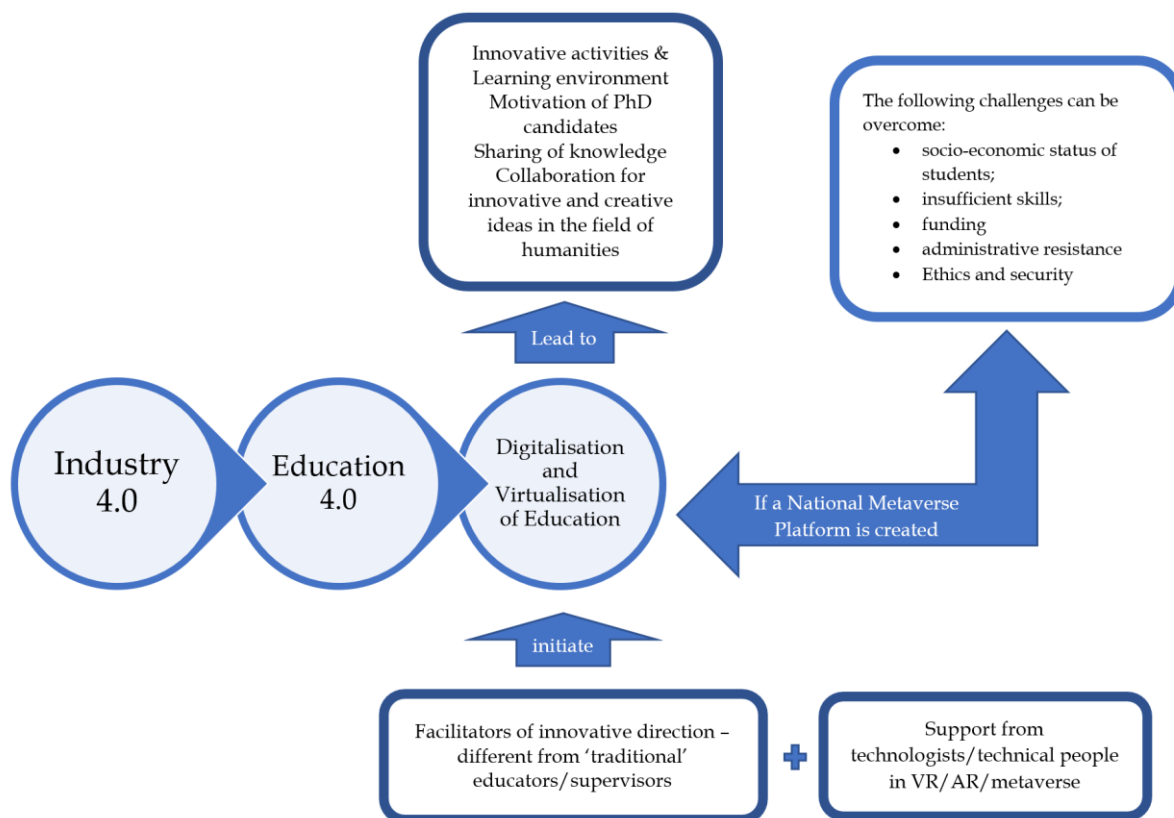


Fig. 1. An innovative research community (created by Neelam F. Pirbhai from existing literature review)

5. Conclusions and Future Research

Extant literature reveals that reports of the experiences of humanities doctoral students are relatively rare. This small sample size is far from being representative of doctoral candidates enrolled in French studies and further studies are therefore needed to convey the outcomes of post-PhD graduates in the field. In this empirical study, the different case studies have enabled us to investigate the support doctoral students have received in order to make learning leaps and develop research and technical skills which can benefit them in or outside academia. Despite the resilience of all respondents to complete their PhD (French studies), it seems that some changes are needed in the field. To sum up, we can say that the role of the university in Education 4.0 is not to simply produce and disseminate knowledge but must also prepare the student to face the labour market. Indeed, all key stakeholders of the higher education must have a vested interest in seeking an improvement in this situation in order to help the doctoral candidate achieve what is called “doctorateness” (Yazdani & Shokooh, 2018, p. 31). This study can open up new grounds for further research. Future studies can address a larger sample size and focus on the Mauritian diaspora in French studies in order to better evaluate and analyse doctoral training in the field. Maslow Hierarchy of Needs Model can also be integrated to study the challenges faced by doctoral candidates in French studies, their needs and their motivations.

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6. References

- Agné, H., & Mörkenstam, U. (2018). Should first-year doctoral students be supervised collectively or individually? Effects on thesis completion and time to completion. *Higher Education Research & Development*, 37(4), 669-682. doi:10.1080/07294360.2018.1453785
- Ali, A., & Kohun, F. (2006). About Socialization in Doctoral Programs in IS Doctoral Programs. *International Journal of Doctoral Studies*, 1, 21-33. Retrieved October 7, 2022, from <http://ijds.org/Volume1/IJDSv1p021-033Ali13.pdf>
- Andrews, L. (2015). The Humanities are Dead! Long Live the Humanities! *Journal of the National Collegiate Honors Council*, 3-11. Retrieved October 7, 2022, from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1403&context=nchcjournal>
- Bednall, T. C. (2018, July 12). PhD completion: an evidence-based guide for students, supervisors and universities. *The Conversation*. Retrieved October 7, 2022, from <https://theconversation.com/phd-completion-an-evidence-based-guide-for-students-supervisors-and-universities-99650>
- Bosworth, A. (2016, February 24). National Endowment for the Humanities (NEH) Chair William D. Adams calls for the restructuring of academic humanities, By:. *Cornell Chronicle*. Retrieved October 7, 2022, from <http://news.cornell.edu/stories/2016/02/neh-chair-calls-restructuring-academic-humanities>
- Brause, R. S. (2000). *Writing your Doctoral Dissertation – Invisible Rules for Success*. New York: Routledge Falmer.
- Cobb, R. (2010). Publish and Anguish: Reconsidering the Never-Ending Crisis of the Humanities. *Imaginations-Journal of Cross-Cultural Image Studies*. doi:<http://dx.doi.org/10.17742/IMAGE.inaugural.1-1.9>
- Contreras, G. S., González, A. H., Fernández, M. I., Cepa, C. B., & Escobar, J. C. (Modern Applied Sciences). The Importance of the Application of the Metaverse in Education. 2022. doi:10.5539/mas.v16n3p34
- Cruz-Castro, L., & Sanz-Menéndez, L. (2005). The employment of PhDs in firms: trajectories, mobility and innovation. *Research Evaluation*, 14(1), 57-69. doi:<https://doi.org/10.3152/147154405781776292>.
- English, J. F. (2012). *The Global Future of English Studies*. Oxford: Wiley-Blackwell.
- Hancock, D. R., & Algozzine, B. (2006). *Doing Case Study Research - A Practical Guide for Beginning Researcher*. New York: Teachers College Press.
- Hutcheon, L. (2013). Moving around the Furniture: Restructuring the Humanities in Challenging Times. Retrieved October 7, 2022, from <http://arcade.stanford.edu/occasion/moving-around-furniture-restructuring-humanities-challenging-times>
- League of European Research Universities. (2007). *Doctoral studies in Europe: excellence in researcher training*.
- McAlpine, L., & Austin, N. (2018). Humanities PhD Graduates: Desperately Seeking Careers? *Canadian Journal of Higher Education*, 48(2), 1-19. Retrieved October 7, 2022, from <https://journals.sfu.ca/cjhe/index.php/cjhe/article/view/188157/pdf>
- McGill-University. (2013). White Paper on the Future of the PhD in the Humanities. *Institute for the Public Life of Arts and Ideas*. Retrieved October 7, 2022, from https://www.acfas.ca/sites/default/files/fichiers/1536/white_paper_on_the_future_of_the_phd_in_the_humanities_dec_2013_1.pdf
- Ministère de l'éducation nationale de l'enseignement supérieur et de la recherche. (2016). *Arrêté du 25 mai 2016 fixant le cadre national de la formation et les modalités conduisant à la délivrance du diplôme national de doctorat*. Paris: Journal officiel "Lois et Décrets". Retrieved September 10, 2022, from <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000032587086/>
- Miranda, J., Navarrete, C., Noguez, J., Molina-Espinoza, J.-M., Ramírez-Montoya, M.-S., Navarro-Tuch, S. A., . . . Molina, A. (2021). The Core Components of Education 4.0 in Higher Education: Three Case Studies in Engineering Education. *Computers & Electrical Engineering*, 21. doi:<https://doi.org/10.1016/j.compeleceng.2021.107278>
- Peltonen, J. A., Vekkaila, J., Rautio, P., Haverinen, K., & Pyhältö, K. (2017). Doctoral Students' Social Support Profiles and Their Relationship to Burnout, Drop-Out Intentions, and Time to Candidacy. *International*

- Journal of Doctoral Studies*. Retrieved September 9, 2022, from <http://ijds.org/Volume12/IJDSv12p157-173Peltonen3241.pdf>
- Places, E. D. (1969). Cent cinquante ans du doctorat ès lettres (1810-1960). *Bulletin de l'Association Guillaume Budé*, 209-228.
- Pyhältö, K. (2012). What contributes to doctoral student engagement in doctoral studies? *Seminar for doctoral thesis supervisors*. University of Helsinki: Center for Research and Development of Higher Education Faculty of Behavioural Sciences.
- Saunders, C. (2009). Developing researchers in the arts and humanities: lessons from a pilot programme to develop discipline-specific research skills. *International Journal for Researcher Development*, 1(1), 45-69. doi:<https://doi.org/10.1108/1759751X201100004>
- Schöpfel, J., Prost, H., Jacquemin, B., & Kergosien, E. (2019). PhD training on Open Science in French universities. *Cadernos BAD, Associação Portuguesa de Bibliotecários, Arquivistas e Documentalistas*, 115-129. Retrieved September 9, 2022, from <https://hal.archives-ouvertes.fr/hal-03296176>
- Spencer, V. A. (2014). Democratic Citizenship and the "Crisis in Humanities". *Humanities*, 3(3), 398-414. doi:10.3390/h3030398
- Spivak, G. C. (2003). *Death of a Discipline*. West Sussex: Columbia University Press.
- Statistics-Mauritius. (2020). *Digest of Education Statistics 2020*. https://statsmauritius.govmu.org/Pages/Statistics/By_Subject/Education/SB_Education.aspx
- Stellenbosch-University. (2018). Module 2 Theme 1: DIES/CREST Training Course for Supervisors of Doctoral Candidates at African Universities.
- Sung, A., Leong, K., & Cunningham, S. (2020). Emerging Technologies in Education for Sustainable Development. In *Partnerships for the Goals. Encyclopedia of the UN Sustainable Development Goals*. Springer. doi:https://doi.org/10.1007/978-3-319-71067-9_61-1
- Sverdlik, A., Hall, N. C., McAlpine, L., & Hubbard, K. (2018). The Phd Experience: a Review of the Factors Influencing Doctoral Students' Completion, Achievement, and Well-Being. *International Journal of Doctoral Studies*, 13, 361-388. doi:<https://doi.org/10.28945/4113>
- Teng, Z., Cai, Y., Gao, Y., Zhang, X., & Li, X. (2022). Factors Affecting Learners' Adoption of an Educational Metaverse Platform: An Empirical Study Based on an Extended UTAUT Model. *Mobile Information Systems*. Retrieved October 7, 2022, from <https://downloads.hindawi.com/journals/misy/2022/5479215.pdf>
- Turin, R. (2018). Between the disciplinary past and the practical past: figurations of the historian in the crisis of the humanities. *Tempo*, 24(2). doi:<http://dx.doi.org/10.1590/tem-1980-542x2018v240201>
- Velinova-Sokolova, N. (2022). Education 4.0, Innovative Practices In Higher Education And Covid-19. *Yearbook of Sofia University*. Retrieved October 7, 2022, from <http://www.feba.uni-sofia.bg/sko/yrbook/Yearbook21-10.pdf>
- Vitae. (2011). *Vitae Researcher Development Framework (RDF) 2011*. UK: The Careers Research and Advisory Centre (CRAC) Ltd. Retrieved September 9, 2022, from <https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-development-framework-rdf-vitae.pdf/view>
- Williams, A. R., Windle, R., & Wharrad, H. (2020). How will Education 4.0 influence learning in higher education? *Journal of Learning Development in Higher Education*, 17. doi:10.47408/jldhe.vi17.572
- Yachnin, P. (2016). The Crisis in the Humanities—What Would Shakespeare do? *Humanities*, 5. doi:10.3390/h5020031
- Yazdani, S., & Shokooh, F. (2018). Defining Doctorateness: a Concept Analysis. *International Journal of Doctoral Studies*, 13. Retrieved October 7, 2022, from <http://ijds.org/Volume13/IJDSv13p031-048Yazdani3122.pdf>