

## A model perception on the independence of PhD students in promoting the research capability at University of Rwanda

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### Abstract

*It is familiar that PhD students from University of Rwanda (UR) are used to rely on their supervisors and Faculty members. In this paper we perceive the importance of training the PhD student to be independent researcher from the beginning of doctoral studies until the successful completion by suggesting a supervision model. Based on UR framework and regulations for higher degrees and on our own experience as former PhD students and current supervisors at UR, we deeply discuss a model containing different activities/ period in which/ where PhD students may be or not be fully independent. We also link with other researchers' findings and discussions with UR stakeholders such as students, supervisors, faculty and so forth to draw conclusions on UR in particular. As results, we suggest that a well-trained independent PhD student from UR should be able to think critically, to initiate, to innovate and to enhance the research capabilities. Therefore, after completion of studies, this PhD graduate will be able to serve the community, and hence will be a pillar to achieve in particular the University's mission; national, regional and worldwide goals in general.*

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**Key words:** PhD supervision, independent researcher, PhD student, research capability, critical thinking.

### Introduction

The doctoral supervision is not an easy task as think non scholars since it requires an intensive work with student (Amundsen & McAlpine, 2009). Bjuremark, (2006) ascertains that supervision is a working process where a more experienced scholar has a special relationship with a less experienced person. Although one of the goals of doctoral education is to transform a doctoral student into a critical and independent researcher (Bøgelund, 2015), instead, many students are still expecting fully support from their supervisors. The other main goals are -to train the student in a specific area and become an expert in that area – to contribute to new knowledge by producing papers and innovate in that area. However it is better to help a student to be independent and doing so is a significant achievement (Wadee et al., 2010). Moreover, a student may be stuck due to different reasons cited by Ahern & Manathunga, (2014) such as cognitive, social, and emotional among others. When these happen, the role of supervisor comes in to address the reason behind the non-progress of student. All challenges a doctoral student may encounter are not only to engage in academic work but to become familiar with the environment and to build new relationships (Dietz et al., 2006). An independent student will use Figure 1 to address these challenges.

To get a PhD, graduate students from different disciplines, with support from their advisors/supervisors, are expected to deepen their knowledge of theories and methods in research, undergoing processes that form them into independent, critical researchers, and finally; to develop knowledge useful to the surrounding society (Bjuremark, 2006).The bad supervision such as: not reading student writings, never respect the supervisory meetings among others may sooner or later affect the career of the student. Hence, if a student is relying on the availability and full assistance from supervisor, it seems that he will never (or spend many years to) be a PhD

holder. Other supervisors mediate, facilitate and mentor the students and these actions are not helping the later to be independent, they have to initiate action and not relying on some one's decision.

As former PhD students, we realized that supervisors intend to orient their supervisees in their own area of expertise instead of letting them to make their own choice. Research shows that PhD programs do not always prepare students well for the realities they face once they earn faculty appointments (Baker & Lattuca, 2010). Pointing fingers to UR, the UR framework in PhD supervision does not emphasize on how to help PhD students to be independent as it is explained in the section below. Therefore, our main objective is to suggest a PhD supervision model at UR which can enhance the independency of candidates until the successful completion of their studies.

The rest of the paper is as follows: current PhD supervision at UR, model conception on PhD supervision, followed by the conclusion and list of references.

### **Current PhD supervision framework at UR**

In previous years at University of Rwanda, the supervision consisted only up to master's degree, which means that the PhD supervision is a new introduced academic activity.

At school of postgraduate studies, all academic documents related to PhD programmes and regarding rules, regulations, supervision plans and others policies should be available and agreed by both supervisors team and by the PhD candidate.

Currently at UR, the principal supervisor (also called the first/main supervisor) is involved in preparation of draft thesis, and sometimes imposes a particular orientation on the student. In fact the supervisor should attempt to be critically constructive and encouraging but the thesis must be the creativity of the student.

According to UR framework and regulations for higher degrees (UR, 2014), a supervision team shall normally have had a combined experience of supervising not fewer than two candidates to successful completion. This may be achieved as follows:

- Either at least one supervisor shall have had experience of supervising at least two candidates to successful completion of a research degree, or
- At least one supervisor shall have had experience of supervising one candidate to successful completion of a research degree and one shall have taken an approved and certified course on Postgraduate Degree supervision.

Inside the above UR framework and regulations there is a point stipulating that one supervisor shall be the Director of Studies, responsible to the University for the ethics of the student's research and ensure that the University's procedures are followed (see Fig 2). The Director of Studies must be a member of the University's staff.

In addition to the supervisors, an adviser or advisers may be proposed to contribute some specialized knowledge or a link with an external organization.

A request for a change in supervision arrangements shall be made to the School on the appropriate form. A change may be initiated either by the student or by a member of the supervisory team, in consultation with the relevant School Committee, and a recommendation made to the College Academic Council, by the relevant School Committee, through the College Director of Research. For further information see (UR, 2014).

From PhD students' experience, most of them are academic staffs and they are assigned to other different duties such as: teaching, invigilating, supervising undergraduate students and etc. With this regards, they do not have sufficient time to avail themselves to be trained independently because they rely on their supervisors' thoughts. Another issue which makes students to be dependent is the financial challenges; they lack research facilities such as internet connectivity, e-libraries, laboratories fees, survey, less but not few.

Supervisor's at UR face challenges of not being directly involved in preparation of policies related to PhD program, candidates' selection, overloaded with other duties, etc. They also lack motivation such as financial incentive on each successful candidate and research grant.

**Model conception on PhD supervision at UR**

Based on our own experience as supervisors and PhD holders, some improvements on the current situation are needed to have a successful completion of independent PhD candidate. Moreover, we base our ideas to other researchers' best practices to conceive the suggested supervision model (Gatfield. 2005, Bøgelund, 2015, Mainhard et al., 2009).

The diagram below suggests that an independent PhD student is on the centre of his PhD studies.

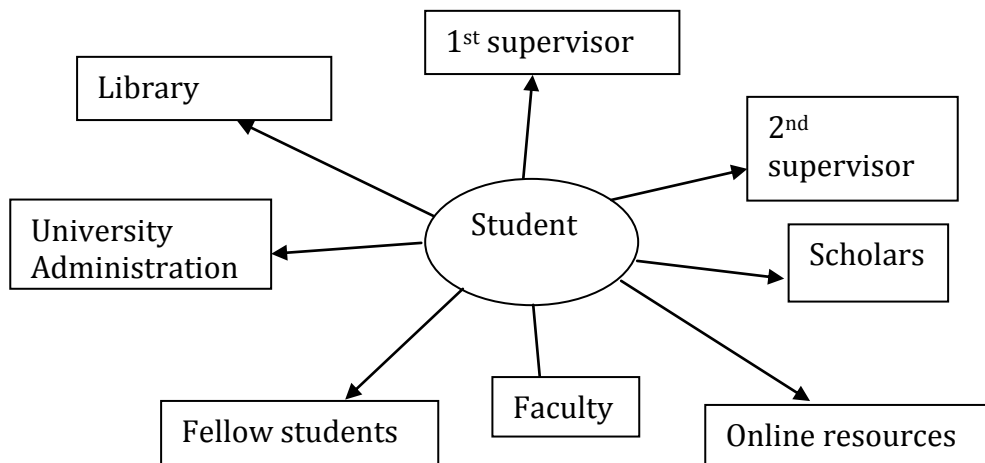


Figure 1: Student at the centre of his research

If the student meets some problems or gets stuck in his studies, he can unpin the problem by contacting either his supervisors, other academics in the department or fellow students (Phillips & Pugh, 2010). PhD candidates and fellow students often meet each other in canteens, coffee shops or even bars, and in which regularly meetings are organised at the homes of the leading professors (Dietz et al., 2006). The second supervisor in some universities is considered as one who does not have enough experience in supervision or

has not supervised previously. He assists the main supervisor to guide the student until the completion. The other alternatives are looking solution in library by reading books, papers or online search such as Google.

The need for peer and institutional support other than supervisory support is evident too, as all students feel the need to be part of a community of scholars, particularly others using practice-led or practitioner-led approaches (Andrew, 2012). So a student will not be traversing a set course laid out by others. He will be expected to initiate discussions, ask for the help that he needs, argue about what he should be learning, and so on. He is under self management, so it is no use sitting around waiting for somebody to tell him what to do next or, worse, complaining that nobody is telling him what to do next; in the postgraduate world these are opportunities, not deficiencies (Phillips & Pugh 2010). However, Students need to be able to trust their supervisor to understand the nature of the journey involved in work across disciplines to help them make judgements about the scope, difficulty and timing of their work (Barbara, 2009). Independent students must feel that their supervisors are available but not necessarily always present (Bégin&Géarard, 2013).

Some supervisors complained bitterly about the increasing dependence of candidates, who continuously need advice, even on the choice of their topic, and on all methods, questionnaire details, etc. (Wadee et al., 2010). Doing a PhD degree means becoming an independent researcher, so if the above remains a dominant attitude among PhD candidates, this may be considered as a lack of maturity, and as a reason to terminate the supervision.

Our concern is on the preparation of PhD students, how they can develop the independence behaviour during their researches. To initiate a student to be fully independent during his doctoral studies, he is advised to follow the model captured in Figure 2 described by the following selected activities such as: choosing supervisors, selection of topic, selecting courses related to research topic, deciding the accomplishing time and selecting the thesis examiners.

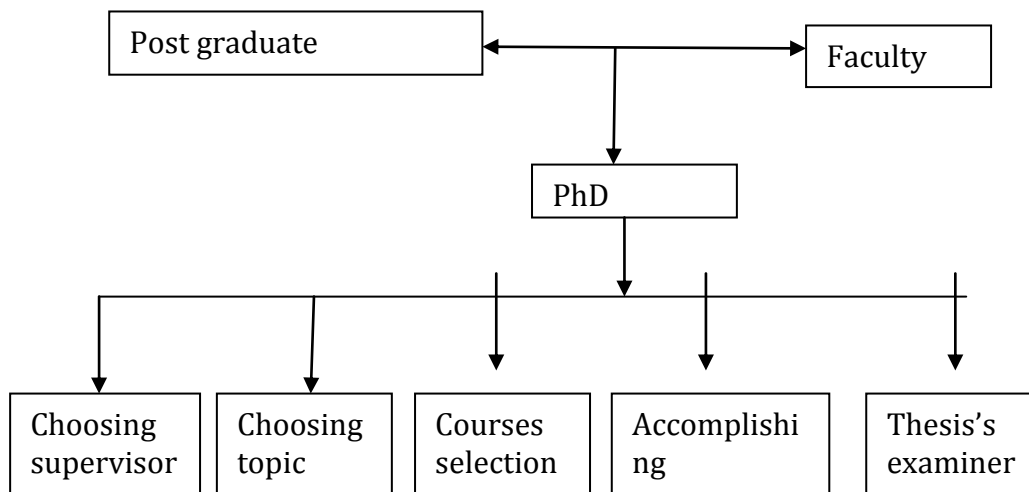


Figure 2. Suggested PhD supervision model.

Relationships between rows of Figure 2 are explained in the section of Current PhD supervision framework at UR. The five activities within this suggested model are described as below.

### **Choosing supervisors**

In some Universities and especially at UR, supervisors are appointed without asking students views. Aranda-Mena & Gameson, (2012) state that a high percentage of students are failing to complete their studies due poor quality of supervision and not being involved in choosing supervisors. Therefore, students have to ensure that at least one member of supervisory team is a very experienced researcher in his area of interest. Any senior staff in the department can be appointed as supervisor but very few have the ability, persistence, vision and respect to move a diversity of students through the examination process (Bøgelund, 2015). It is advisable to a student who is supposed to spend three or four years at a University to select a supervisor with whom he feels comfortable.

The PhD student and supervisor get to know and trust each other and they may become close friends for the rest of their lives (Bartlett & Mercer, 1999). This relationship is limited on a common task which is to focus on research and thesis writing (Bartlett & Mercer, 1999). If the student contributes in choosing his supervisor, he will feel responsible and will draw his expectations in independent manner. By selecting his supervisor, the student will first do research on the available staff and working in his area of interest, then talk directly with individual academics to ascertain their willingness to supervise him (Dietz et al., 2006).. Finally, the student will inform the graduate centre or faculty graduate administrators of their commitment (see Figure 2). All these tasks have to be performed by the student himself. A good beginning makes a good end.

### **Selecting a topic**

The theory of the research process, as a starting point, involves the selection of a topic and a research area (Aranda-Mena & Gameson, 2012). Choosing an ideal doctoral dissertation topic is probably one of the most important decisions students will make while in graduate school (Lei, 2009). At UR, some graduate students would spend a couple of years looking for potential topics before finally selecting one for their thesis. It was one of the most critical decisions that graduate students are facing to decide which doctoral dissertation research topic they will select. Even with the growth of information technology, many graduate students worldwide view the research topic selection process to be quite stressful and time-consuming (Pooock & Love, 2001). They are afraid of finding and eventually selecting a topic completely on their own. But this is no longer a major problem for a student with well developed skills in information searching. However, with the internet being the main domain of information for students there is a potential risk of being overwhelmed by information and coming across erroneous or misleading information (Aranda-Mena & Gameson, 2012). Therefore, students must find out what professors and scholars have commented on a topic, perhaps this topic is exciting enough to capture their attention for further research in the next several years (Lei, 2009). Bøgelund, (2015) argues that there is a strong tie between PhD research and supervisor's own research. This means that most students are not independent in choosing their own topics in which they feel comfortable and this may result in non-completion.

If a student is able to choose his own topic, this automatically means that he may also be able to write the thesis and accomplish on time. He will ask and answer himself the following questions when selecting and evaluating a research topic: is the topic interesting? Does the student have prior knowledge on it? How difficult is it likely to be? While answering these questions, the student will be more independent in writing. Students have

to take the lead in selecting their topic in case of waiting a topic coming from supervisors. The Figure 3 below helps to find a topic if you are independent.

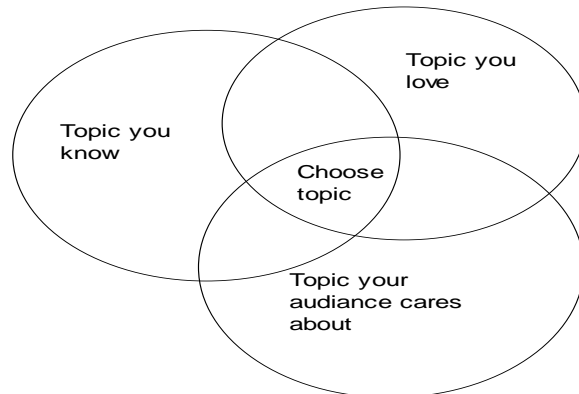


Figure 3. How to choose a topic for an independent PhD student

### **Courses selection related to the research topic**

Most of PhD students at UR are required to study a number of different types of courses within their PhD program. This is supported by Bjuremark, (2006), where she points out that PhD students have to attend special courses on theoretical and methodological issues related to their research. However, there are challenges of finding relevant courses that fit the student's research topic (Blomé et al. 2012). The supervisor's role in guiding the selection of courses in this case involves an understanding of the strategies required for knowledge integration, modelling for students the processes through which concepts and research approaches across disciplinary boundaries can be understood as commensurate (Barbara, 2009). In reality, independent candidates do not like being told to go to courses; if they need some, they will organise it all themselves (Wadee et al., 2010). If the students have chosen to select the topic by their own, they may be encouraged to select courses related to their research topic too. It is students' responsibility to read, learn new theories and pass the courses. They do not need to be pushed or reminded to do so.

### **Deciding the accomplishing time**

At early stage of PhD studies, doctoral students precise the expected accomplishing time. At UR, the PhD program is maximum four years for a full time and 5 years for a part time candidate unless there is a case of extension. However, some students may go through periods where their researches seem to stall, hence their motivation drops and they seem unable to make any progress (Ahern & Manathunga, 2004). This is a sign showing a supervisor that the student progress has stalled. It is important for the supervisor to be acutely aware of factors that may impact on PhD studies and supervision (Wadee et al., 2010). He may continuously familiarize his PhD student with the requirements for PhD degree.

It is equally important to mention that students are failing to complete doctoral degrees due to the level of stress involved in their daily working. Myers, (1999) describes two types of stress namely stress in the social sense and stress in the task sense. On one hand, he argues that stress in the social sense is brought about when the student is unable to socialize and relax with family, friends, and significant others without feeling guilty that time is being wasted that could be spent working on the dissertation. On the other hand, he mentions that

stress in the task sense is brought about because the amount of time spent working on the dissertation makes the researcher feel negligent in terms of time away from family, friends and significant others. It is the responsibility of the student to manage the said stresses and get done his dissertation. At UR, a professor may be supervising more than one student and having other responsibilities in the department or faculty. It is why it is very important for the candidate to be independent in overcoming different challenges alone without the intervention of the supervisor.

### **Choosing Thesis' examiners**

The Doctoral student examiner should be a reputed PhD holder scholar with expertise and competence in the field of the student research (Mullins & Kiley, 2002). At UR, the thesis is examined by three examiners. They must be from outside the student's University and no other relationship with either the student or the supervisor (Brooks & Heiland, 2007). Examiners are sent the text to review and write a report and recommend a grade. The grade may be pass or fail, but very few of students are given the grade fail. This is the reason why the procedure of choosing a thesis examiner has to be handled with high vigilance. At UR the PhD student does not contribute in choosing the Thesis examiners. This is done by the supervisor and the faculty council.

To make the student to be independent it is recommended to include him in discussion of appointing potential examiners. Since some papers require suggested reviewers, a student may be familiarized on how to select competent reviewers and it known that avoiding submitting work for review mainly involves finding ways of avoiding writing (Ahern & Manathunga, 2004).

### **Conclusion and recommendations**

This paper aimed at conceiving a PhD supervision model at UR. We have shown that it is advisable to encourage PhD students to think and criticise their own works. At the early stage of the program studies, students depend a lot on their supervisors and those later try to move gradually the candidates towards greater independence. If, however, students want to conduct their first project independently, they are likely to have quite a task ahead of them. In doctoral education, students have to take responsibility for managing their learning and for getting themselves a PhD. Of course, as said above, there will be people around to help them – their supervisor(s), administration, other academics in department, fellow students and so on. Most of time some people will even tell students (in their opinion) what they have to do to obtain the degree, but the responsibility for determining what is required, as well as for carrying it out, remains firmly with candidates. And if it turns out that they need a particular topic or theory for their work, then it is no excuse to say that nobody has informed them it was relevant. It is their responsibility. The ball is on their side as shown by Figure 4.

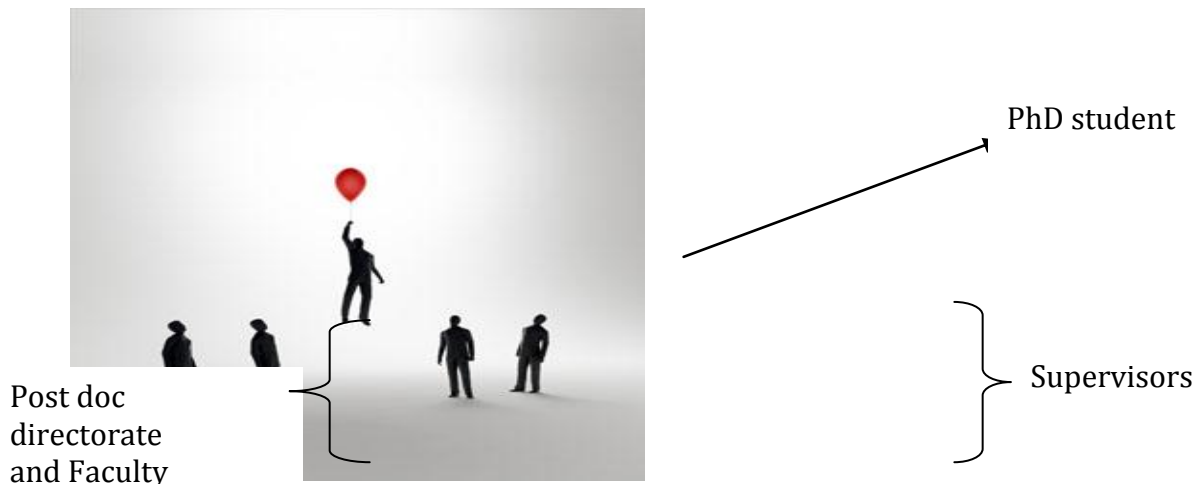


Figure 4. Supervisors and administration, monitoring the progress of an independent PhD student

The suggested PhD supervision model at UR stipulates that PhD students should be stimulated to be independent researchers, and not be dependent on publications together with their supervisors. They can initiate a project, and present the final product with little guidance on their supervisors.

As recommendation, it is desirable that there are regular interactions between the student and supervisors to frequently monitor the writing process. The University could take a more formal approach and request monthly independent reports from both the student and supervisor that would go to directorate of postgraduate. Since this program is still young at UR, supervisors must be regularly trained for PhD supervision and hold a PhD supervision certificate.

## References

- Ahmed A. Wadee, Moyra Keane, Ton Dietz & Driekie Hay (2010). *Effective PhD supervision, mentorship and coaching*, Rozenberg Publishers, Amsterdam, ISBN 978 90 3610 202 5.
- Ahern K. & Manathunga C. (2014). *Clutch-Starting Stalled Research Students*. *Innovative Higher Education*, Vol. 28, No. 4, Summer 2004.
- Amundsen, C. & McAlpine, L. (2009). *Learning supervision: trial by fire*. *Innovations in Education and Teaching International*, 46(3), 331-342.
- Andrew, M. (2012). *Supervising doctorates at a distance: three trans-Tasman stories*. *Quality Assurance in Education*, 20(1), 42-53.
- Aranda-Mena, G. & Gameson, R. (2012). *An alignment model for the research higher degree supervision process using repertory grids-reflections on application in practice in built environment research*. *Australasian Journal of Construction Economics and Building*, the, 12(3), 66.
- Baker, V. L. & Lattuca, L. R. (2010). *Developmental networks and learning: Toward an interdisciplinary perspective on identity development during doctoral study*. *Studies in Higher Education*, 35(7), 807-827.



- Barbara Adkins (2009). *PhD pedagogy and the changing knowledge landscapes of universities*, Higher Education Research & Development, 28:2, 165-177, DOI: 10.1080/07294360902725041.
- Bégin, C., & Géarard, L. (2013). *The role of supervisors in light of the experience of doctoral students*. Policy Futures in Education, 11(3), 267-276.
- Bjuremark, A. (2006). *The Relationship between Supervisor and Doctoral Student: Lasting Longer than an Average Marriage in Sweden*, Book chapter.
- Blomé, M., Hellström, D., Kovács, G., Zetterberg, J. & Åkesson, J. (2012). *Course Supervision Challenges in PhD Education*. In LTHs 7: e PedagogiskaInspirationskonferens.
- Brooks, R. L. & Heiland, D. (2007). *Accountability, assessment and doctoral education: Recommendations for moving forward*. European Journal of Education, 42(3), 351-362.
- Bøgelund, P. (2015). *How supervisors perceive PhD supervision—And how they practice it*. International Journal of Doctoral Studies, 10, 39-55.
- Dietz, A. J., Jansen, J. D., & Wadee, A. A. (2006). *Effective PhD supervision and mentorship: a workbook based on experiences from South Africa and the Netherlands: South Africa-Netherlands Research Programme on Alternatives in Development (SANPAD)* (p.133). Rozenberg Publishers, Amsterdam.
- Gatfield, T. (2005). An investigation into PhD supervisory management styles: Development of a dynamic conceptual model and its managerial implications. *Journal of Higher Education Policy and Management*, 27(3): 311.
- Lei, S. A. (2009). Strategies for finding and selecting an ideal thesis or dissertation topic: A review of literature. *College Student Journal*, 43(4), 1324.
- Mainhard, T., van der Rijst R., van Tartwijk J., Wubbels T. et al. (2009). *A model for the supervisor-doctoral student relationship*. Higher Education 58.3, 359-373.
- Mullins, G. & Kiley, M. (2002). *It's a PhD, not a Nobel Prize: how experienced examiners assess research theses*. Studies in higher education, 27(4), 369-386.
- Myers, L. H. (1999). *Barriers to completion of the doctoral degree in educational administration*, Doctoral dissertation.
- Phillips, E. & Pugh, D. (2010). *How to get a PhD: A handbook for students and their supervisors*. McGraw-Hill Education (UK).
- Poock, M. C., & Love, P. G. (2001). *Factors influencing the program choice of doctoral students in higher education administration*. Naspa Journal, 38(2), 203-223.
- Powell, J. D. & Dean, B. J. (1986). *Strategies for completing the doctoral dissertation or master's thesis*. Workshop series sponsored by the counseling center at the University of Illinois in Urbana-Champaign.
- University of Rwanda (UR), (2014). *Framework and regulations for higher degrees by research and regulations on cheating and plagiarism in research degrees*. [www.ur.ac.rw](http://www.ur.ac.rw) , accessed on 22<sup>nd</sup> December, 2016