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Creativity in Higher Education

An assessment on the perceptions of the practice of creative teaching in higher education in Rwanda

Kreatywność w szkolnictwie wyższym

Ocena percepcji praktyki twórczej nauczania w szkolnictwie wyższym w Rwandzie

Słowa kluczowe: Kreatywność, szkolnictwo wyższe, kreatywne nauczanie

Keywords: Creativity, higher education, creative teaching

Streszczenie

Autorzy przedstawili kreatywność w nauczaniu i uczeniu się jako główną siłę napędową tworzenia wiedzy, awansu społecznego i gospodarczego. Ocenili opinie nauczycieli i studentów na temat praktyki kreatywnego nauczania w szkolnictwie wyższym w Rwandzie. Wszyscy respondenci podzielali wspólne poglądy na temat konieczności zwiększania kreatywności w szkolnictwie wyższym. W badaniu zasugerowano, że istnieje potrzeba dalszego doskonalenia różnych metod nauczania i uczenia się, aby skutecznie wdrażać kreatywność w nauczaniu i uczeniu się, co ma kluczowe znaczenie dla

wykształcenia kompetentnych i wykwalifikowanych absolwentów, którzy mogą następnie pomóc w osiągnięciu krajowego celu, jakim jest zwiększenie innowacyjności.

Abstract

The authors presented creativity in teaching and learning as a major driving force towards knowledge creation, social and economic advancement. They assessed the perceptions of teachers and students on the practice of creative teaching in higher education in Rwanda. All respondents shared common views on the necessity of enhancing creativity in higher education. The study recommended that there is a need to further improve the various methods of teaching and learning to effectively and successfully implement creativity in teaching and learning that is crucial to producing competent and skilled graduates that can subsequently help achieve the national goal to increase innovation.

1. Introduction

In today's world, higher education is faced with preparing students for a super complex world¹. Beyond higher education, our college graduates need to be creative to survive and prosper in an ever-changing world. According to Ziska Fields and Christo Bisschoff², creativity becomes a force of great value when it is applied to causes that benefit humankind and the world at large. In the business world, Vincent Sebikari Kagame said that entrepreneurs use creativity to solve everyday problems to provide products and services and make use of limited resources³. In learning and teaching, the traditional teacher-centered transmission model of learning has now shifted to a student-centered model where learners are prepared to be creative in an increasingly complex environment. Learners need the skills and creative approaches to cope successfully. Developing countries including Rwanda need to encourage creativity to improve the quality of life of the people⁴. However, to enhance creativity among the learners, creative teaching practices from our teachers are needed.

¹ Ronald Barnett, *Thinking the University, Again*, Educational Philosophy and Theory, 2000, Vol. 32, No 3.

² Z. Fields, C.A. Bisschoff, *A Theoretical model to measure creativity at a University*, Journal of Social Sciences, No. 34, 2013, p. 47–59.

³ V.S. Kagame, *Critical Analysis of the Obstacles to Business Creativity among Small and Medium Enterprises in Rwanda*, IISTE Developing Country Studies, 2014, Vol. 4, No. 10., 4954.

⁴ *Ibidem*, p. 29.

Experts in the field offer different conceptions of creativity. The term creativity in higher education is widely used but the meaning varies. Monte Wynder⁵ said that educators will have their implicit definition of creativity that will influence their acceptance of creativity as an important skill to be taught. Chris McGoldrick⁶ and Martin Oliver⁷ wrote that teachers give meaning to creativity in the contexts in which they work: (a) Creativity as personal innovation – something new to individuals; (b) Creativity as designs that promote the holistic idea of gradueness – the capacity to connect and do things with what has been learned and to utilize this knowledge to learn in other situations; (c) Creativity as making sense out of complexity such as working with multiple often conflicting factors, pressures, interests, and constraints; (d) Creativity as a process of narrative – making to present the „real curriculum” in ways that conform to the regulatory expectations of how a curriculum should be framed. Stjepan Ozimec⁸, defined creativity as a kind of creation by which one produces something new, different from known, which include an individual way of problem-solving, discovery of the unknown.

On the importance of creativity in higher education, the EUA Creativity Report 2006–2007⁹ recommended: (a) universities should look towards the future in all their activities, rather than being grounded in the past; (b) the high level of expertise of the university community in diverse fields should strive towards “being one step ahead” of the times by going beyond established knowledge, questioning time-honored ideas and trying not only to solve current problems but also be proactive in identifying issues of future relevance; (c) Higher Education Institutions (HEIs) should work towards developing internal quality pro-

⁵ M. Wynder, *Motivating creativity through appropriate assessment: lessons for management accounting educators*, e-Journal of Business Education & Scholarship of Teaching, 2008, Vol. 2, Issue. 2, p. 12–27, Online available from <http://www.ejbest.org>

⁶ Ch. McGoldrick, *Creativity, and curriculum design: what do academics think?* Commissioned Imaginative Curriculum Research Study. Retrieved on February 5, 2019, from <http://www.heacademy.ac.uk/resources.asp>.

⁷ M. Oliver, *Creativity, and curriculum design: what do academics think?* Commissioned Imaginative Curriculum Research Study. Retrieved on February 5, 2019, from <http://www.ltsn.ac.uk/genericcentre>.

⁸ S. Ozimec, *Odgovori Kreativnosti: Kako prepoznati i poticati dječju kreativnost*, Varaždin: Opći Savez društva „Naša djeca.” 1987.

⁹ *EUA Creativity in Higher Education: Report on the EUA Creativity Project 2006–2007*, European University Association, Retrieved March 05, 2019, from http://www.eua.be/fileadmin/user_upload/files/Publications/Creativity_in_higher_education.pdf.

cesses that support the creativity agenda by being geared towards the future and avoid over-bureaucratization.

Norman Jackson of the Higher Education Academy (n.d) reiterated that if creativity is central to being, then higher education needs to understand what it means to be creative in the many disciplinary domains in which students are taught. Jackson emphasized the need to raise awareness of what creativity means in these different contexts and encourage educators to support forms of learning that will enable students to develop the forms of creativity that are most appropriate for their field(s) of study and practice.

Creativity has been considered a major driving force towards knowledge creation and social and economic advancement Dražena Gašpar and Mirela Mabić¹⁰. Incorporating the teaching and learning of creativity in institutions of higher education is essential if educators are seeking to equip their students with tools that help them succeed in their futures.

The assessment of creative teaching in higher education in Rwanda is still limited. It is in this context that the authors conducted this study.

2. Literature Review

In Rwanda, it is projected that 82,000 young Rwandans will attend higher education in 2020. The kinds of training and education they receive are essential so they can contribute to the Country's development. Graduates are expected to have the skills and competencies required to fill in qualified manpower in the labor market, as well as to achieve the national goal to increase innovation. But this can only be achieved if Higher Learning Institutions (HLIs) can provide a quality education based on educational expertise and effective learning conditions.

To help achieve the national goal to increase innovation, creativity is considered the driving force in improving teaching and learning, as well as a cure for a wide range of problems. But creativity in teaching and learning can only occur if creative teaching is practiced in the classroom. Afida Ayob, Aini Hussain and Rosadah Abdul Majid wrote that creative teachers are necessary to inculcate the skills of the students so they can act more effectively in today's globalized world¹¹.

¹⁰ D. Gašpar, M. Mabić, Creativity in higher education, *Universal Journal of Educational Research*, 2015, 3(9), p. 598–605.

¹¹ A. Ayob, A. Husain, & R.A. Majid, A Review of Research on Creative Teachers in Higher Education. *International Education Studies*, 2013, Vol. 6 No. 6, p. 8–14.

Furthermore, Fields and Bisschoff¹² suggested creativity as an important factor in the development of students in higher education, as universities continue to face the challenges of staying relevant and highly competitive. Strategic documents related to higher education in the European Union consider creativity as a required precondition for its development.

European Commission's Europe 2020 document recommended that to achieve innovation, the EU's strengths in design and creativity must be exploited. The European University Association (EUA) initiated a project called "Creativity in Higher Education" designed as an exploratory activity to enhance understanding of the concept and to contribute to the advancement of the European Knowledge society by identifying good practices and providing higher education institutions and their major external stakeholders with operational recommendations on how to foster creativity.

In Rwanda, the transformation of higher education is gaining attention as the government is working towards improving the quality of teaching and learning. The country has become a hub of innovation in African Higher Education with strong government support and the presence of leading institutions such as the Carnegie-Mellon University, African Leadership University, The University of Global Health Equity, the African Institute for Mathematics and Sciences, Oklahoma Christian University, Kepler and the Southern New Hampshire University's Global Education Movement (GEM), and the African German Entrepreneurship Academy, among others.

The University of Rwanda (UR) is the leading university of the country with highly trained instructors, excellent programs, and improved facilities with the support of bilateral partners and international donors. Since the tragic event in 1994, UR has transformed itself into a Center of Excellence in many fields and creative teaching has been considered an important practice in delivering quality teaching and learning. Ayub, et al argued that if students need to be creative and be able to develop knowledge, instructors must practice creative teaching to facilitate the process¹³.

In related research, Gašpar and Mabić¹⁴ conducted a study on creativity in higher education to find out the perception of creativity among students and instructors at the University of Mostar in Bosnia and Herzegovina. The results of

¹² Z. Fields, C.A. Bisschoff, *op.cit.*, p. 47–59.

¹³ A. Ayob, A. Husain, & R.A. Majid, *op.cit.*

¹⁴ D. Gašpar, M. Mabić, *op. cit.*

their study showed that teachers and students of the University of Mostar are aware of the necessity of creativity in the teaching process but, students think that teachers do not encourage them enough to be active participants in the learning process. According to students' opinions expressed in that research, the prevailing model of teaching at the University of Mostar is still ex-cathedra. The researchers recommended that all stakeholders must make an additional effort to enhance creativity, not just in the teaching process, but in other activities of the University.

In Malaysia, a review of research on creative teachers in higher education yielded the following finding that creative teachers share many similar characteristics, such as being student-centered, fostering students' interest in the classroom, showing a high awareness and interpersonal skills, have an internal motivation that is based on values, and willing to take risks while still within the compounds of their safe environment Ayub et al¹⁵.

On the impact of Creativity among entrepreneurs in Rwanda, Kagame¹⁶ conducted his research study on the *Critical analysis of the obstacles to business creativity among small and medium enterprises in Rwanda*. His research resulted in the following conclusion: (a) creativity is important for entrepreneurship; (b) through creativity business owners will be able to come up with new ways of improving existing products or develop new products that are in high demand in the region market; (c) SMEs survival will depend on how business owners are creative; (d) obstacles to creativity can be minimized by encouraging business education among SMEs owners; (d) there is no doubt that SMEs contribute tremendously to Rwanda's development.

Alencar, Eunice & Fleith Denise & Pereira Nielsen¹⁷ reiterated the importance of fostering student creativity in higher education due to the need for preparing young people for the uncertain and complex world of work, which requires individuals to be able to use their creative abilities. Despite this recognition, the researchers found out: (a) the encouragement of creativity in higher education has been a challenge for faculty; (b) although there is agreement that college students should be creative, college faculty are generally not familiar with learning and teaching environments that promote creativity. They also found out the different factors that impact creativity expression in higher education institutions,

¹⁵ A. Ayob, A. Husain, & R.A. Majid, op.cit.

¹⁶ V.S. Kagame, op.cit.

¹⁷ Eunice M.L. Soriano de Alencar, Denise de Sousa Fleith, Nielsen Pereira, Creativity in Higher Education: Challenges and Facilitating Factors. *Temas em Psicologia*. 2017, 25, p. 553–561.

such as (a) students' resistance, the organizational structure of universities, faculty attributes, and pedagogical practices.

The importance of creative teaching in higher education cannot be ignored if we need to produce competent and skilled graduates. It is in this context that the researchers were motivated to find out if creative teaching is being practiced in higher education in Rwanda. If instructors practiced creativity in teaching, creative students will be produced and thus can subsequently achieve the national goal to increase innovation. This article addresses the practice of creative teaching, as well as some important recommendations that facilitate its nurturance in this type of educational setting.

3. Statement to the problem

The vision and mission of the University of Rwanda (UR) are aligned to Rwanda's vision 2020 and EDPRS¹⁸ strategy. The quality of teaching and learning is expected to contribute to the desired national transformation. For higher education to be relevant to the job market, it must empower the graduates to contribute to society's needs and respond to educational, social, political, scientific, and economic challenges of the nation.

The UR is continuously evolving itself to respond to these challenges by committing to constant review of its curricula in creative and innovative ways informed by research and in close consultation with stakeholders. Particular attention is being given to the desirable constellation of professional graduate attributes for the contemporary national and global workforce. The mainstreaming of innovation and entrepreneurship into the curriculum is a key to the student-centered learning approach designed to equip students with the necessary knowledge and skills to engage and contribute creatively to the transformation of society.

Considering the student-centered approach, the UR emphasizes student learning and ensures that pedagogical and assessment practices are fair and rigorous. The UR explores relevant teaching methodologies that may be appropriate to teaching and learning in the national contexts and develop pedagogies that are informed by current research. The University further develops a teaching and learning environment that encourages deep learning and cultivates intellectual curiosity and critical thinking in all learning activities.

¹⁸ Economic Development for Poverty Reduction 2.

The University pledges to develop assessment practice that focuses on learning, standards, and efficient administration and emphasizes formative feedback to maximize student understanding and success. The UR optimizes the use of Information Technology in improving teaching and learning by integrating IT networks and communication protocols into learning environments across all UR campuses. One area that needs attention is the practice of creative teaching by the teachers. In some educational settings, learning how to teach creativity has become a part of the training educators receives. However, even though many teachers have been introduced to the concept of creativity and its importance, there is little known about the consistent practice of creative teaching in the classroom.

This study asked questions regarding the practice of creative teaching by teachers in higher education. It provided the groundwork to determine their understanding of creativity, and what could best be done to enhance creativity in higher education. While many studies have been conducted on creativity within primary and secondary education, there is limited information in finding different studies that directly assess teachers' and students' perceptions on the practice of creative teaching in higher education. The researchers believed that it is essential for teachers to incorporate creativity in their teaching if the goal of the development of a knowledge society is achieved. Larry Livingston¹⁹ states, "Higher education needs to use its natural resources in ways that develop content knowledge and skills in a culture infused at new levels by investigation, cooperation, connection, integration, and synthesis, and creativity is necessary to accomplish this goal".

Without the assessment of the existence of creative teaching practices by teachers, higher education in Rwanda will be unable to adequately assess areas for improvement. Opinions prevailed those educators do not adequately incorporate creativity within their teaching. The key challenges include the ability of the teachers to recognize effective methods of teaching that enhance creativity among students and identify the different factors that affect creativity in the classroom.

¹⁹ L. Livingston, Teaching creativity in higher education, Arts Education Policy Review, 2010, No. 111, p. 59.

4. Objectives of the Study

The general objective of the study was to assess the perceptions of the practice of creative teaching in higher education in Rwanda. The specific objectives of the study were:

- To assess students' observations on the phenomenon of activities practiced by the teachers that are indicative of creative teaching in the classroom;
- To identify teachers' assessment about the different activities practiced in the classroom that are indicative of creative teaching; and
- To find out the respondents' views on the factors affecting the practice of creativity in the classroom.

5. Methodology

5.1. Research Design

The research was conducted by using descriptive research in preliminary and exploratory studies that enabled the researchers to gather data that were summarized, presented, and interpreted. The study used both quantitative and qualitative approaches for the data presentation and interpretation. A quantitative approach was used because numerical calculations were applied to calculate means, percentages, and frequencies. The qualitative approach was used to explore the behavior of individuals on words rather than numbers, depth rather than breadth. Its methods are exploratory; they seek to unearth the opinions, thoughts, and feelings of respondents.

5.2. Description, Objectives and core values of the case study

The College of Arts and Social Sciences at the University of Rwanda (UR-CASS) is one of six colleges of a public university in Rwanda and comprises 4 schools namely SAL²⁰, SJC²¹ SL²², and SSPAS²³ which all bear the mission of delivering education through creative teaching. It is located in Huye district in the southern province at Akanyaru-Huye main road. It is bordered by the Tumba

²⁰ School of arts and languages.

²¹ School of journalism and communication.

²² School of law.

²³ School of social, political and administration sciences.

sector in the south, IRST^{24,25} in the West, private buildings in the North, and the Save sector in the East. It is accommodated in the buildings of UR⁷ (former UNR²⁶) which was established in 1963 by the government of Rwanda in cooperation with the Congregation of the Dominicans from the Province of Quebec, Canada.

The overall objective of the University of Rwanda (UR) is to be a research-led university with national, regional, and global impact. The College of Arts and Social Sciences (CASS) community commits to: develop interdisciplinary, problem-based academic programs aligned with Rwanda's development needs; integrate IT-based²⁷ resources from around the world; ensure students have the leadership, entrepreneurship, and management skills needed to create employment; prepare students for service to their communities and country through applied service-learning programs nationally and internationally; create applied, evidence-driven, research centers focused on problem-solving, aligned with Rwanda's development needs; and develop continuing education programs for upgrading skills and knowledge tailed on excellence in teaching, research, creative endeavors, student services which lead to efficiency and effectiveness.

Moreover, integrity and honesty give CASS community the ability to realize the greater good in their actions and programs, be held accountable by doing what is right and ethical, communicate with honesty, directness, and respect. UR is open and welcoming to diverse people, ideas, and perspectives from all over the world. This is essential to quality education in a globally interdependent community. The diversity at UR strengthens the academic programs and educational environment hence preparing students to be competitive on the international stage. It is well aware that it was created for students.

Students are put at the forefront of all university's activities and are involved at all levels of decision-making in the University. This compels the University community to be compassionate towards the service rendered to the nation which demands commitment, sensitivity, selfless service, courage, understanding, and care. Creativity and innovation are a hallmark of CASS's effort in creating a niche in higher learning education in Africa. This has been done through seeking new approaches to service delivery, new innovative academics programs, new products, and providing a conducive environment for imagination and stimulation of ideas.

²⁴ Institut de Recherche, de science et de Technologie.

²⁵ University of Rwanda.

²⁶ Universte Nationale du Rwanda.

²⁷ Information Technology-based.

In its efforts to be a catalyst of social justice, the CASS believes that fairness, honesty, integrity, and impartiality should resonate within the society through the students. Therefore, CASS is committed to offering a transformative education that empowers qualified students to consider their greater place within a global society. By reinforcing the importance of social consciousness to students and the greater community, the University plays a significant role in shaping the world's next generation of progressive and ethical leaders. It is accountable to its students, staff, stakeholders, and the public for fulfilling its mission through strong and effective stewardship of resources and open exchange of ideas by engaging the public.

5.3. Research Population and Sample Size

The population for this paper is composed of students and teachers at UR-CASS. The particular sample size was selected as they are manageable and it is enough to generate findings and generalize them to a bigger population. Convenience sampling selects any available individuals as respondents and is the easiest to conduct²⁸.

5.4. Sampling population

Ideally, the whole student population should be used to get information for the research but the researchers reduced the student sampling population of 702 from different years; 252 years 2 students representing 35.8%); 272 years 3 students representing 38.7%), and 178 years 4 students representing 25.3%) within four schools to avoid any eventual bias in data collection. From the teachers' sampling, out of the total of 77 teachers, 23 (constituting 29.87%) teachers from different schools were selected. It was difficult to investigate the whole population due to inadequate resources and time. Jeffrey G. Bailey²⁹ explains the purposive sampling technique as a technique whereby the researcher uses his/her judgment about which respondents to choose and picks only those who can best meet the purpose of the study. From this perspective, the students' and teachers' samples were considered.

²⁸ Donald R. Cooper, Pamela S. Schindler, *Business Research Methods* 11th ed. New York: McGraw-Hill 2011.

²⁹ J.G. Bailey, *Academics' motivation and self-efficacy for teaching and research*. Buckingham: Open University Press 1999.

5.5. Data Collection Instruments

The questionnaires were used to obtain quantitative information. The questionnaire consisted of two parts: (a) a biographic part with questions concerning the biographical data of the respondents and the (b) second part with questions regarding their views on the frequency of activities being practiced in the classroom that are indicative of creative teaching practices, as well as their perceptions on the different factors that affected the practice of creativity in the classroom.

The questionnaires were written in English. Unstructured interviews guided the discussion with the respondents and thus needed to elaborate on several issues. Each interview lasted for few minutes. Students and teachers (both females and males) were randomly selected from each school in the CASS. FGDs³⁰ were organized composed of randomly selected respondents.

5.6. Data Analysis

Donald R. Cooper & Pamela S. Schindler says data analysis involves reducing accumulated data into a manageable size³¹. The data were edited to check for accuracy, consistency, and easy analysis. The data were presented in tables for easy interpretation with the use of the Microsoft Excel program.

5.7. Measurement Scale

The Likert scale model was used for the study because they are convenient, more applicable, and easy to interpret³². Respondents chose from a scale of options, using the following mode categories: always; often; sometimes; and never to identify their responses as shown in Table 1;

Table 1.
Response Mode Categories (Likert Scale Model)

ALWAYS	OFTEN	SOMETIME	NEVER
<i>Interpretation:</i> At all Times/ Consistently	<i>Interpretation:</i> Generally/Commonly but not consistently	<i>Interpretation:</i> Rarely	<i>Interpretation:</i> Not at all

³⁰ Focus group discussions.

³¹ Donald R. Cooper, Pamela S. Schindler, Business Research Methods 11th ed. New York: McGraw-Hill 2011.

³² Ibidem.

6. Results and Discussions

This paper sought to assess the perceptions of the practice of creative teaching in higher education in Rwanda. Descriptive statistics were used to describe the responses of the sample.

The descriptive statistics show that among the student respondents, there were 510 males (72.6%) and 192 females (27.3%), with the majority (81.6%) belonging to the 21–25 age bracket. With regards to home origin, (72.7%) of the students are from rural areas while (27.2%) are from Urban Areas. With regards to academic level, (35.8%) of the students belong to the Year 2 level; (38.7%) are from Year 3 level; and (38.7%) belong to the Year 4 level.

Students' observations on the phenomenon of activities practiced by the teachers that are indicative of creative teaching in the classroom

The first objective was to find out the students' perceptions about the phenomenon of creative teaching practices in the classroom. The respondents were asked to express their observations of different activities being adopted during the teaching process. In the research survey, the mode categories shown in Table 1 were used to identify their responses.

Different statements shown in Table 2 were used in the survey to assess students' observations of the adoption of different activities practiced in the classroom that are indicative of creative teaching.

Table 2.
Students' observations about creative teaching practices in classroom

(n = 702)

During the class, the following activities are practiced by the teachers		always	Often	Sometimes	Never
		%	%	%	%
1.	Generating new ideas during class	9	36	55	0
2.	Thinking outside of the box when teaching	13	39	48	0
3.	Searching beyond the obvious	18	33	49	0
4.	Doing things that others have done but in different ways	16	25	59	0
5.	Combining different ideas	11	30	59	0
6.	Thinking Critically	15	28	57	0
7.	Experimenting	29	30	41	0

8.	Taking risks	2	30	68	0
9.	Engaging in detailed discussion of new ideas	15	30	55	0
10.	Allowing students to express themselves freely	10	20	70	0
11.	Accepting different opinions	5	30	65	0
12.	Allowing students to disagree with the teacher	7	38	55	0

Source: Primary Data, September 2016.

Interpretation

The findings as shown in Table 2 reflected the students' assessments that although different activities indicative of creative teaching is present, teachers have rarely practiced them regularly in the classroom. The majority of the students observed that teachers rarely allow them to express themselves freely. In the discussions that follow, most students said that most of the teachers are consistently adopting the teacher-centered approach in teaching.

Teachers' assessment about the different activities practiced in the classroom that are indicative of creative teaching

The second objective was to find out the teachers' assessment on various activities being practiced in the classroom that are indicative of creative teaching. The respondents were asked to express their observations of the different activities being adopted during their teaching process. In the research survey, the mode categories shown in Table 1 were used to identify their responses. Different statements (shown in Table 2) were used in the survey to identify teachers' assessment of their adoption of different activities practiced in the classroom that are indicative of creative teaching.

Among the teacher's respondents, there were 22 males (96%) and 1 female (4%). On teaching experience, 11 (48%) have 16–20 years of teaching experience. On Academic ranking, 17 (74%) have Ph.D. degrees and 6 (26%) have master's degrees.

Table 3.
Teachers' views about creative teaching practices in the classroom

(n = 702)

During the class the following activities are practiced		always	Often	Sometimes	Never
		%	%	%	%
1.	Discussions and debates	15	50	35	0
2.	Cooperative Learning	11	52	37	0
3.	Collaborative work	19	45	36	0
4.	Problem based Teaching	20	42	38	0
5.	Case Study	10	50	40	0
6.	Student presentation	10	55	35	0
7.	Designing and presenting a project	19	43	38	0

Source: Primary Data, September 2016.

Interpretation

The findings as shown in Table 3 reflected the different variations of the teachers' observations on classroom activities that are indicative of creative teaching. All of the teachers have expressed in their self-assessments that they have practiced all the activities that are indicative of creative teaching in the classroom. However, the results showed that majority of them generally but did not consistently practice these activities. In the discussions that followed, the researchers have noted that most of the teachers believed their methods of teaching are creative and are designed to students' skills level. The majority of them used student presentation followed by case study acts as a way to encourage creativity among students. In the discussions that followed, most of them said that students are hesitant to express new ideas and that they still lack critical thinking skills and confidence to express themselves, and thus, most of the time they practiced direct instruction as a teaching strategy.

Factors affecting the practice of creativity in the classroom

Table 4.

Factors affecting the practice of creativity in the classroom

TEACHERS' VIEW		(n = 23)	
Statement		AGREE	DISAGREE
		%	%
1.	Motivation is low among students to be creative	80	20
2.	School life is not favorable	64	36
3.	Conservative nature of Rwandese culture	75	25
4.	Traditional teaching method	70	30
5.	Mindset	75	25

Source: Primary Data, September 2016.

Table 5.

Factors affecting the practice of creativity in the classroom

STUDENTS' VIEW		(n = 702)	
Statement		AGREE	DISAGREE
		%	%
1.	Motivation is low among students to be creative	70	30
2.	School life is not favorable	80	20
3.	Conservative nature of Rwandese culture	75	45
4.	Traditional teaching method	80	20
5.	Mindset	78	22

Source: Primary Data, September 2016.

Interpretation

As shown in Tables 4 and 5, the majority of the students and teachers have consistently agreed on the following factors that affected the practice of creativity in higher education:

- The low motivation characterizes both students and teachers in being creative;
- School life is not favorable to the process of creative teaching;
- The Rwandese culture that influenced the way teachers and students think and act; the Traditional teaching method is still being widely practiced.

On Teaching and Learning

In the process of teaching and learning, it is challenging to use all methods of teaching that are indicative of creative teaching practices. A teacher should choose the proper methods as may be applicable according to the levels of the learners and the subject matter being taught. This reality is clearly shown in the results of the teachers' views on how they generally but not consistently adopted the different activities in their classroom.

Teaching and learning are not two distinct phenomena. Approaches to teaching are related to students' learning approaches and subsequently to their learning outcomes. If a teacher's focus is on what he or she does or on transmitting knowledge, students are more likely to adopt a surface approach to learning and on the reproduction of knowledge. If a teacher adopts a more student-centered approach to teaching, the students are more likely to adopt a deep approach to learning and focus on deeper understandings of the phenomena they are. On examining the impact of training of university teachers on approaches to learning of their students, Graham Gibbs and Martin Coffey found that students took a surface approach to a significantly lesser extent after their teachers had been trained. They implied that teacher training in higher education should be oriented towards changing teachers' approaches to teaching to a more student-centered approach³³

Teaching is about facilitating students' learning: Students are encouraged to construct their knowledge and understanding and to strive towards becoming independent learners. Furthermore, student-centered teachers have been found to use a wider repertoire of teaching methods, than teachers who adopt a teacher-centered approach to teaching³⁴.

7. Conclusion

The findings and discussion above lead to the conclusion that creative teaching practices are being practiced in the classroom although not consistently. While teachers have implemented practical methods in their teaching that are indicative of creative teaching, the majority of the students observed that most of

³³ G. Gibbs, M. Coffey, The impact of training of university teachers on their teaching skills, their approach to teaching, and the approach to learning of their students. *Active Learning in Higher Education*, 5, p. 87–100.

³⁴ *Ibidem*.

the teachers are hesitant to take risks in adopting new methods outside of the traditional norms. The respondents have consistently agreed on the following factors that affected the practice of creativity in higher education: low motivation which characterizes both students and teachers in being creative; school life which is not favorable to the process of creative teaching; the Rwandese culture that influenced teachers and students on the way they behave and act; traditional teaching method, which is mostly teacher-centered is still prevalent. This study has led to the conclusion that creative teaching needs to be consistently practiced by teachers to enhance creativity in teaching, and students need to be motivated to participate actively in the learning process. The study findings yielded the following recommendation that there is a need to further improve the various teaching methods among teachers to effectively and successfully implement creativity in teaching and learning that is crucial to producing competent and skilled graduates. Traditional methods of teaching (teacher-centered) are still prevalent. To effectively enhance creativity, the following characteristics must be adopted: student-centered; fostering students' interest in the classroom; showing a high awareness and interpersonal skills, and have an internal motivation that is based on values. It is also very important to motivate and encourage students and teachers to change their mindsets so everyone can contribute to enhancing creativity in both the teaching and learning process, as well as in research, management, and other activities in the University.

8. Limitation

The findings are based on a limited sample, thus more studies in different institutions and larger samples, are highly needed to further assess the practice of creative teaching in higher education in Rwanda.

9. Scope for further research

Since the study was not exhaustive enough in assessing creative teaching in higher education, the authors recommended further researches to expand the case study to cover more institutions of higher learning so that they make the study much more representative for the higher education in Rwanda. To obtain relevant and objective data, it is recommended that a larger sample be used, validate the instrument of research and further evaluations are conducted to come up with specific recommendations in fostering creativity in higher education.

Research on creative teaching should be done in Rwanda to investigate if the instructors have creative elements in themselves that can be translated into their teaching methods. With this, more creative students will be produced and thus can subsequently achieve the national goal to increase innovation. Further studies on effective techniques and teaching methods practiced in the classroom that enhance creativity are highly recommended.

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