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PLANNING FOR TEACHING AS A PREDICTOR FOR TRAINEES' ACADEMIC PERFORMANCE IN RWANDA POLYTECHNIC: A CASE OF IPRC HUYE AND IPRC KITABI

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ABSTRACT

The purpose of the study was to assess the effect of planning for teaching on academic performance in Rwanda Polytechnic. The objectives of this study was to assess the effect of planning for competency-based training on trainees' academic performance, effect of planning for competency-based assessment on trainees' academic performance and effect of planning for classroom environment management on trainees' academic performance. This study adopted Correlational research design and a sample of 82 trainers from 104 trainers as target population were selected by using random sampling while 10 HODs, two DASs and one DQA were selected using census technique. The structured questionnaire was embraced in order to collect data. Mean, standard deviation, Pearson product correlation coefficient, regression coefficient, significant level and analysis of variance were used for data analysis. The findings indicated that the average mean, standard deviation, Pearson product correlation coefficient, regression coefficient, significance level for planning for competency-based training were 4.1,0.9,0.876, 76.8% and 0.179 respectively; the average mean, standard deviation, Pearson product correlation coefficient, regression coefficient, significance level for planning for competency-based assessment were 4.15,0.90,0.91, 83% and 0.001 respectively; that the average mean, standard deviation, Pearson product correlation coefficient, regression coefficient, significance level for classroom environment management were 4.2,0.8,0.919, 84.4% and 0.5 respectively. The results indicated that there was a significant positive relationship between planning for teaching and academic performance in Rwanda Polytechnic. The study highlighted that there is a need of increasing of efforts related to planning for all activities that are believed to promote academic performance in Rwanda Polytechnic.

Keyword: planning for teaching, trainees 'academic performance, Competency-based training planning, competence -based assessment, Planning for classroom environment management

1. INTRODUCTION

In the last ten years the roles and responsibilities of teachers and trainers in TVET have changed considerably in a wide range of countries, becoming multi-functional and combining many professional elements with those of active stakeholders in TVET (CEDEFOP, 2009; ETF, 2006; Grootings and Nielsen, 2005; OECD, 2009a). Changes have challenged teacher training programmes to adapt to change via new policies and structures so as to prepare trainers for their new and constantly evolving roles.

Several studies have been carried out and have identified that planning for teaching differ based on someone's need and knowledge. Planning for competency based training involves the preparation of curriculum, chronogram, scheme of work, course handout and session plan. Babalola (2003) defines educational planning as an activity that 'involves taking decisions for future action with the view to achieving predetermined objectives through optimum use of scarce resources' in educational context. Malaysia is of no exception when it comes to the issues of TVET trainers. According to Ismail (2018), in Malaysia there is a need of competent teacher capable of planning teaching and learning process in TVET involving translation of knowledge into practice in order to provide hands on guidance; establish good relationship with student; motivates students; conducts lessons with adequate

knowledge on curriculum and proficiency process which are needed to ensure effective teaching and learning process in TVET institutions.

However, current corps of trainers in South African technical and Vocational Education and Training (TVET) colleges is weak in the aspects of technical knowledge and skills; pedagogical skills as well as in current and relevant industry experience (Palmer, 2007). Moreover, the researchers linked the lecturers' experience of practicing their trades in the workplace to the quality of their instruction and their ability to prepare their students adequately for the world of work. Considerable effort has been made by the Ministry of Education of Rwanda to increase enrolment, equip the polytechnics with qualified teachers, provide learning materials and fund the program to improve Rwanda polytechnics through TVET since 2008-2018. The effort to cater for effective teaching and learning is still in force for promoting academic performance within Rwanda polytechnic college.

Regardless of Rwanda Polytechnic teachers' plan to provide instructional materials, academic motivation, good teaching habits and high education aspiration, academic performance is still low as it was indicated by the academic results for previous years. However, academic performance in Rwanda Polytechnic cannot be achieved if trainers are not making effective planning for all various activities that can bring an academic performance. Lack of effective planning for competency-based training would lead to poor outcomes of academic performance as well as the poor quality of education.

Due to the above gaps, the author found that it is significant to conduct a study aiming by this topic because none of studies focused on effect of planning for teaching on learners 'academic performance in Rwanda Polytechnic has been conducted and researcher declared that the study intends to fill in this break by providing genuinely searched data on planning for teaching that contribute to academic performance in improving quality of education.

The study was guided by the following specific objectives.

1. To assess the effect of planning for competency–based training on trainees' academic performance of IPRC-Kitabi and IPRC Huye.
2. To measure the effect of planning for assessments on trainees 'academic performance of IPRC Kitabi and IPRC Huye.
3. To evaluate the effect of planning for classroom environment management on trainees' academic performance of IPRC Kitabi and IPRC Huye.

2. LITERATURE REVIEW

2.1. Planning for Competency-based training

Competency –based training planning refers to the planning of various teaching materials that are being used in training and learning process. In Rwanda Polytechnic, planning of training materials involves the preparation of curriculum, chronogram, scheme of work and session planning. Competence-based training is further explained as an institutional process that moves education from focusing on what academics believe graduates need to know (teacher focused) to what students need to know and be able to do in varying and complex situations (Mbarushimana & Kuboja, 2016). Mbarushimana (2016) indicated that competency-based training is focused on outcomes (competencies) that are linked to workforce needs, as defined by employers and profession. Competence-based training has been defined as an approach to training that places emphasis on what a person can actually do as a result of training (Wesselink, Dekker, Biemans, & Mulder, 2010). Competence-based training is defined as training which develops the skills, knowledge, and attitudes required to achieve competency standards. Bakhda and Sushila (2004) found that a trainer is one who prepares the learning contents, orders materials, delivers learning through different methods and manages time among many others during teaching and learning process.

2.2. Planning for competency-based assessment

According to Edg (2015), the term assessment in education refers to a wide variety of methods or tools that educators use to measure and document the academic readiness, learning progress, skill acquisition or educational needs of a student. In Rwanda Polytechnic, planning for competency based assessment involves the preparation of both formative assessment and integrated assessment (Diop, 2020). In TVET College, baseline for performing any integrated assessment is 70%.

According to Bello (2011), assessment plays a significant role in the educational process since it is the main method of appraising students' achievement. According to Bello (2011), assessment is the process of determining how much an objective of a particular learning task has been achieved by learner. To be useful and effective, assessment and evaluation require planning and should be an integral part of planning each lesson or unit as well as general planning at the beginning of the school year or course. Teachers need to know what and how much students have learned in order to monitor the effectiveness of instruction, to plan ongoing instruction, and for accountability purposes (Kandamby, 2017). Likewise, Schildkamp and Kuiper (2010) found that trainer can use trainees' assessment data to monitor students' progress, to identify learning needs, to innovate their teaching, and to evaluate and reflect on their own teaching practices.

2.3. Planning for classroom environment management

Brophy (2010), argued that "learners are individuals and must be treated as such if we expect to optimize their motivation and learning". Huntwork (2020), indicated that classroom management differs from one teacher to another because of the teacher's personality, teaching style, preparedness, and number of students in the classroom. The findings indicated that planning for classroom environment management is necessary to promote effective teaching and learning as well as academic performance.

According to Umoren (2010), the concept of classroom management is broader than the notion of student control and discipline, it includes all the things teachers must do in classroom to foster students' academic involvement and cooperation in classroom activities to create conducive learning environment. Morse (2012), indicated that classroom management involves curtailing learner's disruptive behaviors such as fighting and noise making, close observation, arrangement of classroom learning materials, and response to students who suffer from poor sight (vision), poor hearing, poor reading, poor writing, poor spelling, shame, dullness, hyperactivity and poor study habits.

According to George and Sunday (2017), creating organized and orderly classroom, establishing expectations, inducing students' cooperation in learning tasks, and dealing with the procedural demands of the classroom. According to Bassey (2012), the wider view of classroom management shows increased engagement, reduction in inappropriate and disruptive behaviors, promotion of student responsibility for academic work, and improved academic performance of students. In addition, Kalin et al. (2017) classroom management involves how teacher works, how class works, how teacher and students work together and how teaching and learning takes place.

On one hand, Classroom management requires specific skills such as planning, organizing, coordinating, leading and control as well as an aptitude for team work. It requires a great deal of commitment, initiatives, teachers' willingness to adjust, creative thinking and actions (Abel, 2011). According to Chukwuemeka (2021), clear instruction on what should be done gives the students concrete direction to compliance. Therefore, to enhance effective classroom management, trainer has to plan ahead on all activities related to classroom environment management.

Brophy (2010), highlight that teachers should consider the following questions when planning for any learning activity. (1) What are the learning goals? (2) Why will students be learning this content or skill? (3) When and how might they use it after they learn it? (4) Is there a way to use advance organizers to provide students with organizing concepts? (5) What elements of the activity could you (the teacher) focus on to create interest, identify practical applications, or induce curiosity, suspense, or dissonance? (6) Does the activity include interesting information or build skills that students are eager to develop? (7) Does it contain unusual or surprising information? (8) Can the content be related to events in the news or in students' lives? (9) Are there aspects that students are likely to find surprising or difficult to believe? (10) Are there ways to stimulate curiosity or create suspense by posing interesting questions? The level of student's interest influences their attention, goals, and levels of learning (Ruiz, León, Vega-Santana, González, 2021). These are elicited situational interest, maintained situational interest, emerging individual interest, and a well-developed individual interest.

2.4. Academic Performance

Performance is considered as an important paradigm in attaining goals of any organizational activities. Some see performance as synonymous with success (Olusola, 2011) and a number of persons relate performance to effectiveness, efficiency, and productivity in ideal exploitation of resources (Hilman& Abubakar, 2017; Tukamuhabwa, Eyaa, & Friday, 2011). Greenberg (2011), has the view that performance is a set of financial and nonfinancial indicators, which offer data on the level of accomplishment of objectives and results. Hazelkorn (2015) stated that most of higher education institutions used peer review and accreditation as their performance assessment. Academic performance must consider the students' academic achievement and non-students' academic performance. Student's-related academic attainment contains student academic status, classes of degree, and graduation rates as indicators for assessing university performance (Hilman& Abubakar, 2017). Hilman and Abubakar (2017) stated that non student's related academic achievement consists of having competitive positions, innovation, organizational agility, sustainability, and market share whereas other research has made emphases in teaching and research as indicators for measuring performance in academia (As if et al., 2013; Asif & Searcy, 2014).

3.METHODOLOGY

This study adopted the correlational research design. According to Cresswell (2012), correlational research designs are procedures in quantitative research in which investigators measure the degree of association (or relation) between two or more variables using the statistical procedure of correlational analysis. This degree of relationship, presented as a number, indicates whether the two variables are related or whether one can predict another. The study used correlational research design because the researcher aimed at establishing the relationship between planning for teaching and academic performance. This study employed quantitative approach that relied on the principle of verifiability that means confirmation, proof, corroboration or substantiations and generalization of the findings on the entire populations which constitutes the blueprint for collection, measurement, and generation of data in quantitative form and analysis of data (Kothari, 2006). The study was carried out in 2 Integrated Polytechnic Regional Colleges (IPRCs) and these are under organization of Rwanda Polytechnic.

The population of the study researcher comprised of 104 Trainers, ten Heads of Departments (HoDs), two Director of Academic Services (DAS) and one Director of Academic Quality (DAQ). That means the population of the study comprised of 117 subjects in total. the study used a sample of 95 participants (82 trainers, ten Head of Department, two Directors of Academic Services and one Director of Academic Quality Assurance. The population and sample size are clearly described in the following table.

Table 1. Distribution of the sample

Target academic staff	Population	Sample size	Sampling method
Trainers	104	82	Random sampling
Head of Departments	10	10	Census technique
Directors of Academic Services	2	2	Census technique
Directors of Academic Quality Assurance	1	1	Census technique
Total	**117**	**95**	

Source: Research data

In this study, simple random sampling was used in selecting the involved sample. The researcher

considered the Trainers, Head of Departments, the Director of Academic Services and the Director of Academic Quality Assurance as the right respondents to consider that should provide necessary and useful information about academic performance. The sample size for trainers was determined using Slovin's formula and was applied as follows:

n = N / (1+Ne2)

Where:

n= Sample size

N= Population size (104)

e= margin of error (0.05)

n=104/(1+104x0.052)

n=82.539

As per the calculations above, a sample of 82 trainees was used in this study. In addition, the sample size for Head of Departments, the Director of Academic Services and the Director of Academic Quality Assurance was determined using census technique (or total enumeration). This consists of taking the whole population as a sample because it is too small (Creswell, 2012).

In data collection, a structured questionnaire via-online Google form and documentation were used. The questionnaire was in the form of point 5 Likert scale (1=strongly disagree; 2= disagree; 3= uncertain; 4=agree and 5=strongly agree). Data were analyzed using descriptive statistics (frequencies, percentages, Mean, standard deviation) and inferential statistics (Pearson product correlation coefficient, regression analysis and the analysis of variance (ANOVA). The researcher tested the validity and reliability of the questionnaire before administering them to the respondents. The validity was tested using experts in research who made comments on the questionnaire. The comments were addressed by the researcher to improve on questionnaire. The reliability of questionnaire was tested using Cronbach Alpha analysis and the results are as follows:

Table 2: Reliability test results

Variables	Number of items	Cronbach Alphas	Comments
Planning for Competency–based training	12	0.815	Accepted
Planning for assessments	12	0.906	Accepted
Planning for classroom environment	12	0.889	Accepted

Source: Research data

The results in table 2 show that the Cronbach alphas were above 80%. This indicated that most items in this questionnaire had high squared multiple correlations, an indication that the questionnaire passes reliability test. Cronbach Alphas above 0.7 is regarded as satisfactory (George & Mallery, 2003). This means that the tool was adequate in measuring how the effect of of planning for teaching on trainees' academic performance in Rwanda Polytechnic.

In data analysis, the data has been summarized, coded and entered into the Statistical Package for Social Science (SPSS) for analysis. Regression analysis, analysis for variance (ANOVA) was used to assess the effect of planning for teaching on trainees' academic performance in Rwanda Polytechnic. In addition, descriptive statistics (mean and standard deviation) was used to measure the level of respondents' agreement with the activities related to planning for teaching.

3.1.Findings

This research presents analysis of data collected and its interpretation in relations to the objectives and the aims of the study. The aim of the study was to find out the effect of planning for teaching on trainees' academic performance as managed by the trainers in Rwanda Polytechnic. On the other hand, the study was aimed at responding to the following questions;

What is the effect of planning for competency–based training on trainees' academic performance of IPRC-Kitabi and IPRC Huye?

What is the effect of planning for assessments on trainees' academic performance of IPRC Kitabi and IPRC Huye?

What is the effect of planning for classroom environment management on trainees' academic performance of IPRC Kitabi and IPRC Huye?

3.2. Effect of planning for competency- based training on trainees' academic performance

The analysis of planning for competency-based training in teaching is a paramount activity that is believed to promote academic performance. The table 2 below shows the status of planning for competency- based training and academic performance in both IPRC Kitabi and IPRC Huye.

Table 3. Mean and standard deviation for planning for competency-based training

Statement	N	Mean	Std.
Trainers always prepare scheme of work at the beginning of each academic year	95	4.51	0.88
When planning a session, trainer looks on various activities related to occupational standard	95	4.23	0.73
Trainers always prepare and update the module content for each academic year	95	4.44	0.9
Trainers need to prepare session plan so that trainees are involved in all activities	95	4.39	0.73
Trainer's session plan acts as a guide when he/she training	95	4.27	0.72
At which levels the planned curriculum respond to the labor market need	95	4.24	0.67
Trainers are involved in the planning for curriculum	95	4.23	0.85
When trainer planning a session he/she thinks about how much his/her is trainees perform	95	4.47	0.61
Trainers always prepare chronograms at the starting of each academic year	95	4.13	0.99
The preparation of module content to be taught take much on the practice indicated in the curriculum rather than availability of the instructional materials	95	4.03	0.82
Trainers always prepare session plan at the beginning of each session	95	3.94	1.02
Most of trainers are well equipped in preparation for training documents needed in TVET schools	95	3.51	1
The over responsibilities of trainers especially in preparation for training documents do not reduce trainers' performance	95	3.41	1.16
Average	**95**	**4.1**	**0.9**

Note: Strongly Disagree= [1.0-1.49] =Very Low Mean; Disagree= [1.5-2.49] =Low mean; Neutral= [2.5-3.49] =Average mean; Agree= [3.5-4.49] =High mean; Strongly Agree = [4.5-5.0] = Very High mean. N: Sample, M: Mean, Std: Sitandard deviation

Source: Primary data

A look at the mean distribution and corresponding standard deviation indicate strong agreement toward planning for competency-based training in Rwanda Polytechnic. The results in table 3 point out that the overall mean and standard deviation (M=4.1, S. D=.9) indicated that planning for competency- based training appear in both IPRC Kitabi and IPRC Huye. The analysis of mean and standard deviation indicated that trainers always

prepare scheme of work at the beginning of each academic year (M=4.51, S. D=.88) appear more in both IPRC Kitabi and IPRC Huye while the overall responsibility of trainers especially in preparation for training documents do not reduce trainers' performance as it is shown by the mean and standard deviation (M=3.41, S. D=1.16). It was noticed that the majority of respondents agreed that planning for competency-based training appear in both IPRCs. However, not all participants displayed the same understanding and understanding of some were far from an acceptable description as provided in the literature or as framed in this study.

The first objectives of this study was to scan the effect of planning for competency-based planning on trainees' academic performance. To this end, Pearson product moment correlation coefficient was computed to show the correlation between planning for competency-based training and trainees' academic performance. The results in table 3 shows that 76.8% of academic performance can be explained by planning for competency-based training and the remaining percentage can be explained by other factors that are not assessed in the model.

Table 4. Model summary for planning for competency-based training and academic performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876[a]	0.768	0.75	0.19957

Source: Primary data

In the same line, analysis of variance in table 4 revealed that planning for competence based assessment had a significant effect (F=43.084, P value <0.05) with planning for competency- based training in Rwanda Polytechnic.

Table 5. Analysis of variance for planning for competency-based training and academic performance

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.716	1	1.716	43.084	.000[a]
Residual	0.518	13	0.04		
Total	**2.234**	**14**			

Source: Primary data

Likewise, the results in table 5 revealed a significance effect of planning for competency-based training factors (B=0.683 and p value <0.05) on trainees' academic performance in Rwanda Polytechnic.

Table 6. Regression coefficient of planning for competency based training and academic performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.595	0.418		1.422	0.179
Planning for competence based assessment	0.683	0.104	0.876	6.564	0

Source: Primary data

The results in the table 6 revealed that there a significant effect of planning for competency based training on trainees' academic performance in Rwanda Polytechnic. The below regression equation indicated that holding planning for competency based training to a constant zero, trainees' academic performance would be 0.595. The results were dependent on the following model as it shown in the table 5.

$$y = \alpha + \beta x + €$$

$$y = 0.595 + 0.683x + €$$

Where y= trainees' Academic performance

x=Planning for competency based training factors

€= error term

3.3.Effect of planning for Competency-Based Assessment on trainees' academic performance

Analysis of planning for competency-based assessment in training is an utmost activity that is believed to promote academic performance. The table 6 indicates the findings on paramount activities that should be considered by trainers during the process of planning for competency-based assessment.

Table 7. Mean and standard deviation of planning for competency based assessment

Planning for assessment	N	Mean	Std.
Trainers provide feedback of individual assignment, group assignment, CATs and final examinations on time	95	4.43	0.71
Trainers always provide summative examination at the end of each module	95	4.41	1.03
Trainers always provide continuous assessment test requires for each learning outcome	95	4.39	0.8
Trainers know all the element to be checked while preparing formative assessment	95	4.33	0.83
Trainers know and respect all steps, criteria and standards required to assess trainees' in summative assessment	95	4.27	0.87
Trainer provide constructive feedback and support to trainees on assessment decision at the end of each assessment	95	4.26	0.88
Trainers provide formative assessment at the end of each session	95	4.23	0.68
Trainers provide subject assessment guidelines in delivering appropriate assessment tasks	95	4.21	0.63
Trainers respect all steps required to be followed during formative assessment	95	4.17	0.85
Trainer always prepare group assignment to his/her trainees at the end of each session	95	4.06	0.99
When planning a session, it is necessary to have an assessment task in mind	95	4.03	1.01
Trainers always use assessment instruments to collect evidence such as observation, checklist, question list, demonstration of a work activity, written test and interview	95	4.01	0.86
Trainers always provide diagnostic assessment before starting new module	95	3.84	0.9
The minimum score to pass each formative assessment is equal or greater to 70%	95	3.79	1.34
Summative assessment is moderated by the expert trainers in the relevant field	95	3.76	1.16
Average	**95**	**4.15**	**0.9**

Note: Strongly Disagree= [1.0-1.49] =Very Low Mean; Disagree= [1.5-2.49] =Low mean; Neutral= [2.5-3.49] =Average mean; Agree= [3.5-4.49] =High mean; Strongly Agree = [4.5-5.0] = Very High mean. N: Sample, M: Mean, Std: Sitandard deviation

Source: Primary data

The results in table 7 point out that the overall mean and standard deviation (M=4.2, S. D=.9) indicated that planning for competency-based assessment appear in both IPRC Kitabi and IPRC Huye. Analysis of mean and standard deviation indicated that trainers provide feedback of individual assignment, group assignment, CATs and final examinations appear as it is shown by the mean and standard deviation (M=4.39, S. D=.71) which is high in both IPRC Kitabi and IPRC Huye while the summative assessment is moderated by the expert trainers in the relevant field as it is shown by the mean and standard deviation (M=3.76, S. D=1.1) which is high in both IPRC Kitabi and IPRC Huye. It was noticed that the majority of respondents agreed that planning for competency-based assessment appear in both IPRCs. However, not all participants displayed the same understanding and understanding of some were far from an acceptable description as provided in the literature or as framed in this study. On the other hand, the value of standard deviation which was above 0.5 indicated that there was heterogeneity of respondents. This revealed that the respondents had the different view related to facts that should be taken into consideration during planning for competency-based assessment.

The results in table 7 shows that 83% in academic performance can be explained by planning for competency-based training and the remaining percentage can be explained by others factors that are not assessed in the model.

Table 8. Model summary for planning for competency-based assessment and academic performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.91017	0.83	0.82	0.17

Source: Primary data

The analysis of variance in table 8 revealed that planning for competency-based assessment had a significant influence (F=62.7, P value <0.05) on trainees' academic performance in Rwanda Polytechnic.

Table 9. Analysis of variance for planning for competency-based assessment and academic performance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.851	1	1.851	62.762	.000a
Residual	0.383	13	0.029		
Total	**2.234**	**14**			

Source: Primary data

On the other hand, the results in table 9 revealed a significance effect of planning for competency-based assessment factors (B=1.635 and p value <0.05) on trainees' academic performance in Rwanda Polytechnic.

Table 10. Regression coefficient of planning for competency-based assessment and academic performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		

(Constant)	-3.459	0.857		-4.038	0.001
Planning for competency based Assessment	1.635	0.206	0.91	7.922	0

Source: Primary data

The results showed that there is a significant effect of planning for competency-based assessment on trainees 'academic performance. The below regression equation indicated that holding planning for competency based assessment to a constant zero, trainees' academic performance would be -3.459. The results were dependent on the following model.

$$y = \alpha + \beta x + €$$

$$y = -3.459 + 1.635x + €$$

Where y= trainees' Academic performance

x=Planning for competency based assessment factors

€= error term

3.4.Effect of planning for classroom environment management and trainees 'academic performance

The analysis of planning for classroom environment management in teaching is a vital activity that is believed to promote trainees' academic performance. The table 11 indicates the findings on paramount activities that should be considered by trainers during the process of planning for classroom environment management.

Table 11. Mean and standard deviation of planning for classroom environment management

Statement	N	Mean	Std.
Trainers make attendance list all the time	95	4.76	0.52
Good planning of trainer minimizes classroom management problems	95	4.61	0.6
As a trainer, it is important to plan for health and safety in a learning environment even if they are other staff whom are in charge of .	95	4.57	0.6
Trainer uses all facilitation techniques required to promote effective training as an expert in training	95	4.54	0.56
Effective trainers demonstrate the correct way to solve a problem.	95	4.54	0.61
Trainees learn best by finding solutions to problems their own	95	4.29	0.92
Trainers arrange learning environment in accordance with the session to be taught	95	4.24	0.92
During training and learning process, role of a trainer is to facilitate trainees own inquiry	95	4.24	0.69
The presence of enough instruction materials help trainers to manage classroom environment	95	4.16	0.75
The effective training and learning cannot be achieved since trainers are overloaded with different academic activities in high learning institution	95	4.04	1.06
Trainer take account on emotional learning place during his/her teaching	95	3.94	0.99

Statement	N	Mean	Std.
All the time, trainer manages trainees behaviors based on their profile	95	3.64	1.05
Trainer provide instruction that should be built around problems with clear, correct answers, and around ideas that most trainees can grasp quickly	95	4.13	0.68
Classroom is overcrowded so that it is difficult to monitor all trainees during session delivery	95	3.41	1.41
Trainer thinks that facilities provided by the institution meet the standards for physical requirement (classroom size, lighting, air conditioning, tables and chairs)	95	3.41	1.14
Average	**95**	**4.2**	**0.8**

Note: Strongly Disagree= [1.0-1.49] =Very Low Mean; Disagree= [1.5-2.49] =Low mean; Neutral= [2.5-3.49] =Average mean; Agree= [3.5-4.49] =High mean; Strongly Agree = [4.5-5.0] = Very High mean. N: Sample, M: Mean, Std: Sitandard deviation

Source: Primary data

The results in table 11 point out that the overall mean and standard deviation (M=4.2, S. D=.8) indicated that planning for classroom environment management appear in both IPRC Kitabi and IPRC Huye. Analysis of mean and standard deviation indicated that trainers make attendance list all the time appear more as it is shown by the mean and standard deviation (M=4.76, S. D=.5) which is very high in both IPRC Kitabi and IPRC Huye while trainers think that facilities provided by the institution meet the standards for physical requirement (classroom size, lighting, air conditioning, tables and chairs) as it is shown by mean and standard deviation (M=3.41, S. D=1.1) which is neutral in both IPRC Kitabi and IPRC Huye. It was noticed that the majority of respondents agreed that planning for classroom environment management in both IPRCs appear. However, not all participants displayed the same understanding and the understanding of some were far from an acceptable description as provided in the literature or as framed in this study.

The results in table 11shows that 84.4% in trainees' academic performance can be explained by planning for classroom environment management and the remaining percentage can be explained by others factors that are not assessed in the model.

Table 12. Model summary for planning for classroom environment management and academic performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.919[a]	0.844	0.832	0.16362

Source: Primary data

Analysis of variance in table 12 revealed that planning for classroom environment management had a significant positive influence (F=70.442, P value <0.05) for trainees' academic performance in Rwanda Polytechnic.

Table 13. Analysis of variance for planning for classroom environment management and academic performance

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.886	1	1.886	70.442	.000[a]
Residual	0.348	13	0.027		
Total	**2.234**	**14**			

Source: Primary data

The results in table 13 revealed a significance positive influence of planning for classroom environment management factors (B=0.683 and p value <0.05) on trainees 'academic performance in Rwanda Polytechnics.

Table 14. Regression coefficient of planning for classroom environment management and academic performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.297	0.433		-0.686	0.505
Planning for classroom environment management	0.867	0.103	0.919	8.393	0

Source: Primary data

The results in the table 13 revealed that there is a significant effect of planning for classroom environment management on trainees' academic performance in Rwanda Polytechnics. The below regression equation indicated that holding planning for classroom environment management to a constant zero, trainees' academic performance would be -0.297. The results were dependent on the following model

$$y = \alpha + \beta x + €$$

$$y = -0.297 + 0.867x + €$$

Where y= trainees' Academic performance

x=Planning for classroom environment management factors

€= error term

4.DISCUSSION

The purpose of this research was to find out the effect of preparation for teaching on trainees' academic performance as managed by trainers in Rwanda Polytechnic. From this broad perspective, the researcher was further narrowed in three research questions: (a) What is the effect of planning for competency–based training on trainees' academic performance of IPRC-Kitabi and IPRC Huye? (b) What is the effect of planning for competency-based assessment on trainees' academic performance? (c)What is the effect of planning for classroom environment management on trainees' academic performance? In order to riposte these research questions, deriving from the aforementioned objectives, a correlational research design was used. In line with the objectives and research questions of this study, the findings were discussed as follows.

4.1. Effect of planning for competency-based training on trainees' academic performance

The first objectives aimed to assess the effect of planning for competency-based training on trainees 'academic performance. The results from the survey showed the Pearson correlation

coefficient was 0.876 indicating that there was significant strong positive correlation whereas the coefficient of determination of 77% indicated that 77% of trainees 'academic performance was driven by planning for competency-based training whereas the analysis of variance in table 4 revealed that planning for competency- based training had a significant effect (F=43.084, P value <0.05) with trainees' academic performance in Rwanda Polytechnic. Thus, the study found that there was a significant strong effect of planning for competency-based training on trainees' academic performance. Thus, when trainers manage to plan ahead in time all needed training documents such as curriculum, chronogram, scheme of work, training manual and session plan, the academic performance will be enriched thus promoting quality of education. Therefore, the above state statement related to planning for competency based training is in line with the findings of (Bakhda and Sushila,2004) who found that a trainer is one who prepares the learning contents, orders materials, delivers learning through different methods and manages time among many others during teaching and learning process. This implies that planning for competency-based training appears to have effect on trainees' academic performance in Rwanda Polytechnic.

4.2. Effect of planning for competency-based assessment on trainees' academic performance

The second objectives aimed to measure the effect of planning for competency-based assessment on trainees' academic performance. It was discovered that majority of respondents agreed that planning for competency-based assessment affects academic performance as it is indicated by the results of coefficient of regression and variance analysis. The results from the survey showed that the Pearson product moment correlation coefficient was 0.91 which indicates that there was a very strong positive influence of planning for competency-based assessment on trainees' academic performance, coefficient of determination was 82.8%, indicated that 82.8% of academic performance is driven by planning for competency-based assessment while the analysis of variance revealed that planning for competency based assessment had a significant positive influence (F=70.442, P value <0.05) on trainees' academic performance in Rwanda polytechnic.

Thus, the respondents accepted that there was a significant or strong positive effect of planning for competency-based assessment on trainees' academic performance. Therefore, when trainers manage to plan ahead in time all needed formative assessments and summative assessment the academic performance will be improved thus promoting quality of education. Consequently, the above findings from various options are in line with the findings of Bello (2011) who found that an assessment is the process of determining how much an objective of a particular learning task has been achieved by the learners thus improving academic performance. In the same line, Schildkamp and Kuiper (2010) found that trainer can use trainees' assessment data to monitor students' progress, to identify learning needs, to innovate their teaching, and to evaluate and reflect on their own teaching practices.

4.3. Effect of planning for classroom environment management on trainees' academic performance

The third objective aimed to identify the effect of planning for classroom environment management on trainees' academic performance. The results revealed that the majority of respondents agreed that planning for classroom environment management was conducted as it is specified by response rate of respondents. The findings showed that there was high mean value of respondents of 4.17 indicating that planning for classroom environment management appear, the standard deviation was 0.83 indicating that there was heterogeneity of responses, the Pearson correlation coefficient was 0.919 indicating that there was a very strong positive influence of planning for classroom environment on trainees' academic performance, coefficient of determination was 84.5%, indicated that 84.5% of academic performance was driven by planning for classroom environment management. Thus, the respondents revealed that there was a significance positive influence of planning for classroom environment on trainees' academic performance. Therefore, when trainers manage to plan ahead the classroom environment, the trainees' academic performance will be improved as far as quality of education is concerned. The findings are in line with George and Sunday (2017) who asserts that creating, organizing and orderly classroom, establish expectation, inducing students' cooperation in learning tasks, and dealing with the procedural demand of the classroom promote students' academic

performance. This is comparatively in agreement with the findings of the study conducted by Kalin et al. (2017) indicated that classroom management involves how trainer works, how class works, how trainer and trainees work together and teaching and learning takes place in order to enhance academic performance. The results is in agreement with the findings of Huntwork (2020), who holds that the classroom management differs from one teacher to another because of the teacher's personality, teaching style, preparedness, and number of students in the classroom.

The study revealed that the effective planning for teaching promotes academic performance. This finding is in line with Chukwuemeka (2021) who found that clear instruction on what should be done gives the trainees concrete direction to compliance thus increase their academic performance. In general, there is a significant influence of planning for teaching on trainees' academic performance in Rwanda Polytechnic.

5.CONCLUSION AND RECOMMENDATION

In view with the findings of this study, it is clear to conclude that there is a significant positive effect of planning for competency- based training on trainees' academic performance, significant positive effect of planning for assessment, significant positive effect of planning for classroom management on academic performance in Rwanda Polytechnic. Therefore, it is also concluded that there is a significant positive effect of planning for teaching on trainees' performance in Rwanda Polytechnic. Finally, the results showed that effective planning for teaching is a catalysis for promoting academic performance in Rwanda Polytechnic.

Since it has been found that there is a very strong significant relationship between planning for teaching and academic performance, the following recommendation have been made:

Trainers of Rwanda Polytechnic should put enough effort in planning for teaching to make sure that the academic performance is improved.

Deputy Vice Chancellor in charge of Trainings, Institution Development and Research, Principals of various IPRCs of Rwanda Polytechnic and Deputy Principals in charge of academics and trainings of IPRCs should put enough effort in provision of all instructional materials required in planning for teaching in Rwanda Polytechnic which are believed to promote academic performance.

Rwanda Polytechnic and IPRCs Quality Assurance staff should monitor on daily basis the planning for teaching for all activities related to training and learning process in order to improve academic performance.

Rwanda Polytechnic should increase capacity development for trainers related to planning for teaching that are believed to uphold academic performance.

Rwanda Polytechnic and their potential partners should invest more in planning for teaching to make sure that academic performance is upgraded.

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