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An Assessment of Educators' Level of Concern on the Adoption of Education 5.0: A Case of One University in Zimbabwe

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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Short Research Article

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ABSTRACT

Background: This study was an assessment of educators' levels of concern on the adoption of Education 5.0: A case of a State University in Zimbabwe. Education 5.0 being a new curriculum reform in Zimbabwe which focuses on five pillars namely, research, teaching, community service, innovation and industrialisation. Educators are directly involved in implementing education reforms hence the importance of an assessment of their stages of concern towards the adoption of Education 5.0.

Methodology: A survey using 35 questionnaire items adapted from the Concerns-Based Adoption model was used to collect data from a sample of 28 lecturers derived from a population of 30. The researcher completed a score sheet using the responses from the questionnaires. Data on stages of concern was coded using Likert scale of 0 to 3. Data was analysed to measure stages of concern among the educators who are implementors of Education 5.0. by averaging the five items per stage to determine the level of concern among the educators. Standard deviation for each stage of concern was also calculated to determine variations among the educators' level of concern.

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Results: The study revealed that the educators had their highest intensity of concern under stage 2 (personal), followed by stage 5 (collaboration), and their least concern on stage 6 (refocusing), followed by stage 3 (management). These findings indicate that these educators are on the self-level of concern, much concerned about how they would personally be affected by Education 5.0 and least concerned about the task at hand, which is the implementation of Education 5.0. **Conclusion:** The high intensity scores of educators' concern at the personal and collaboration stages suggest that educators are more worried about how Education 5.0 adoption would affect them personally and also their significant others, students being part of this group. It is expected of educators to be concerned about how their students will be affected because students are part of lecturers' most valued clients.

Keywords: Educators; education 5.0; curricular reforms; curriculum implementation.

1. INTRODUCTION

are directly involved Lecturers in the implementation of Education 5.0, a curriculum reform. This reform has five key areas which are research. teaching, community service. innovation and industrialisation. An assessment of these educators' stages of concern towards the adoption of Education 5.0 was the main focus of this study. Literature has different types of curriculum reforms, conditions necessary for a successful curriculum reform and different purposes of curriculum reforms which formed part of this study. These aspects of curriculum reforms are briefly explained.

1.1 Background to the Study

Educators, as curriculum reform implementers need to have a buy-in of the changes to the curriculum. This idea is underscored by Marsh as cited in Armstrong [1] by saying "if reform of any kind is to succeed, teachers must believe that they will have a meaningful voice in decisions and will not become the lone scapegoats of a failure to reach goals". In support of this idea. Ornstein and Hunkins, [2] are of the notion that the key to getting teachers committed to an innovation is involvement. Teachers need more than 1-or 2-day workshop on curriculum changes as they need time to make sense of the new curriculum, and also time to dialogue on conditions necessary to implement and maintain the curriculum [2]. This, therefore suggests that certain conditions have to be met if these implementers of curriculum changes are to support it.

1.2 Statement of the Problem

Educators' attitude to the change initiative could either yield positive or negative results. The implementers should see the need for the change, understand the purpose of the change, and what the change involves for them to support it [2]. Since Education 5.0 is a top-down change, proper communication and support from the implementers is paramount. Jabri [3] supports this by saying "genuine consultation and meaningful two-way communication enables topdown change strategies to function more effectively". Canada [4] also suggests that educators be given sufficient time to learn about the innovation and to even experiment with different ways of engaging their students. This therefore suggests that consultation should be sought from change implementors before the adoption of a major change. An assessment of the educators' level of concern towards the adoption of Education 5.0 indicates their readiness for its adoption. This study therefore postulated that most of these same conditions were to be met if Education 5.0 was to be effectively implemented.

1.3 Research Objective

• To assess the stages of concern of educators towards the adoption of Education 5.0.

1.4 Research Question

The study sought to address the following research question:

• What are the stages of concern of educators towards the adoption of Education 5.0?

1.5 Significance of the Study

The study could help to inform The Ministry of Higher and Tertiary Education, Science and Technology Development and other policy makers as they develop the necessary frameworks and guidelines for the adoption of Education 5.0. Heads of university institutions and curriculum planners could also benefit from the study by identifying some of the areas that they might need to work on so as to address the educators areas of concern on the adoption of Education 5.0. Seminars and workshops for educators would then be tailor-made to address the revealed areas of concern rather than wasting resources heating around the bush with no focus area.

1.6 Limitations of the Study

There were factors that were outside the researcher's control that posed as limitations of the study and these included that the study was founded on the perceptions of respondents which might not have reflected the actual readiness of the institution but would give an indication of the level of readiness for Education 5.0 adoption. Second, the study was a case study of one university, hence, generalizability would be limited to other settings that are similar to the university context.

2. LITERATURE REVIEW

2.1 Curricular Reforms in Education

Literature has different definitions of curriculum hence the differences in what is termed curriculum reform. Tirivangana [5] defines curriculum as a set of skills, concepts and processes that students are expected to learn from kindergarten to university. Curriculum is also defined as "an organised set of formal education and/or training intentions" [6]. Other define curriculum learner's authors as experiences, as a system for dealing with people, as a field of study, and as a subject matter [2]. With such different definitions for curriculum. different ways of categorising different themes of educational reform are also expected.

Riddel [7] has three groups of educational reforms which are; planning and efficiency, quality, and curricular reforms. This study will focus on curricular reforms since Education 5.0 is a curricular reform. The university curriculum can be tested curriculum, taught curriculum, hidden curriculum, and learned curriculum. These curriculum types are briefly described below.

2.1.1 Tested curriculum

Tested curriculum is the curriculum that is embodied in the state tests, school system tests, and teacher-made tests [7]. This curriculum seems to be having the strongest influence on the curriculum actually taught. Much lecture time is spent on developing and drilling students to master the art of answering exam questions by practicing on test items similar to those that would appear in the tests. Lecturers concentrate on making their students pass with good grades so as to be absorbed in the industry. The Education 5.0 is against this type of curriculum which put emphasis on grades above application of what has been learnt.

2.1.2 Taught curriculum

The taught curriculum is the curriculum that teachers actually deliver; it is the curriculum that is operationalized in the classroom as the teacher makes adjustments according to the actual situation [7,2]. Even when lecturers use the same course outline, what is actually taught is different from one lecturer to the other, and even from one group of students to the other. However, Zimbabwe Council of Higher Education (ZIMCHE) is coming up with the Zimbabwe National Qualification Framework through the introduction of Minimum Bodies of Knowledge (MBK/S) in Higher and Tertiary Education. Recommendations are being made that 80% of core courses for similar degrees offered at all universities should overlap. Education 5.0 emphasis is on lecturers guiding their students as they do research. Degrees should equip the students with both knowledge and skill (Doctrine for the Modernisation and Industrialisation of Zimbabwe through Education, Science and Technology Development to achieve Vision 2030). What has been learnt in class should be put to practice by the students thereby developing critical thinking in students so that they do not become mere reflectors of other people's thought [8].

2.1.3 Hidden curriculum

Hidden curriculum is what students learn from the way they interact with their lecturers, administrators, other students, and significant others [7]. Students learn a lot from what they observe in their teachers' behaviour; hence, teachers should be good models as the students are watching them [9]. The teacher's influence goes deeper than one can imagine. The hidden curriculum can either build or destroy the students hence should be taken seriously.

2.1.4 Learned curriculum

Learned curriculum is the bottom-line curriculum. It is what students actually learn and is the most important curriculum of all [7]. Often there is significant gap between what has been taught and what has been learnt. Students do not always learn what they are taught due to their various background experiences and interests. Learning is an on-going process and therefore students will never attain completeness in learning [2]. However, the reforms that Education 5.0 is bringing to HTE system are meant to improve on what students are learning in universities.

2.2 Purpose of Curricular Reforms

Higher education should produce citizens who are educable for life and responsible enough to contribute to social harmony and improved living standards [10]. The purposes of any curriculum review process include the following:

- To respond to the changing needs of society at large.
- To establish student learning expectations in each curriculum area.
- To provide a process for continual improvement of the curriculum to meet changing educational demands.
- To establish consistency and progression within, between and across educational levels and subjects.
- To provide an orderly and systemic process that will avoid unnecessary duplication and
- To provide for a responsible use of resources and materials.

Education 5.0 is being driven by most of the outlined reasons above. Societal needs have changed and education needs to catch up.

IMPACT	6	Refocusing	ocusing The individual focuses on exploring ways to reap more universal benefits from the innovation, including the possibility of making major changes to it or replacing it with a more powerful alternative.		
	5	Collaboration	aboration The individual focuses on coordinating and cooperating with others regarding use of the innovation.		
	4	Consequence	The individual focuses on the innovation's impact on students in his or her immediate sphere of influence. Considerations include the relevance of the innovation for students; the evaluation of student outcomes, including performance and competencies; and the changes needed to improve student outcomes.		
TASK	3	RefocusingThe individual focuses on texploring ways to reach the problem ways to reach the standard method in the provided the maxing major changes to it or replacing it with a more powerful alternative.CollaborationThe individual focuses on the innovation is impact on students in his or her immediate sphere of influence. Considerations include the relevance of the innovation for students; the evaluation of student outcomes, including performance and competencies; and the changes needed to improve student outcomes.ManagementThe individual focuses on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, and scheduling dominate.PersonalThe individual is uncertain about the demands of the innovation, hi or her adequacy to meet those demands, and/or his or her relationship to the reward structure of the organization, determining his or her particular structures or personal commitment. Concerns also might involve th financial or status implications of the program for the individual and his or her colleagues.InformationalThe individual indicates a general awareness of the innovation and interest in learning more details about it. The individual does not seem to be worried about himself or herself in relation to the innovation, such as its general characteristics, effects, and requirements for use.UnconcernedThe individual indicates little concern about or involvement with the innovation.			
SELF	2	Personal	The individual is uncertain about the demands of the innovation, his or her adequacy to meet those demands, and/or his or her role with the innovation. The individual is analyzing his or her relationship to the reward structure of the organization, determining his or her part in decision making, and considering potential conflicts with existing structures or personal commitment. Concerns also might involve the financial or status implications of the program for the individual and his or her colleagues.		
	1	Informational	The individual indicates a general awareness of the innovation and interest in learning more details about it. The individual does not seem to be worried about himself or herself in relation to the innovation. Any interest is in impersonal, substantive aspects of the innovation, such as its general characteristics, effects, and requirements for use.		
	0	Unconcerned	The individual indicates little concern about or involvement with the innovation.		

Fig. 1. The stages of concern about an innovation [13]

The introduction of ICT in education is one area curriculum had to be adjusted to meet the needs of the advanced technological era. Education 5.0 which is heritage based is also promoting the use of locally available resources to provide goods and services both for local and foreign consumption. Consistency in education is also being promoted by the MBK/S that are being introduced in Zimbabwean universities.

2.3 Concerns-Based Adoption (CBA) as a Curriculum Implementation Model

An assessment of educators' stages of concern about the adoption of Education 5.0 was done using the CBA model questionnaire. The concern stages at which the educators are would give an indication of their readiness level for adoption of the change. The CBA model was used for this since it links change to human attitude and Unlike other behaviour [2]. curriculum implementation models such as the Overcoming-Resistance-to-Change (ORC) model and the Organisational-Development (OD) model, the CBA model addresses only adoption (implementation) of curriculum, not development and design [2]. This, therefore made CBA model more appropriate for this study which was on implementation of a curriculum reform.

The CBA model has 6 stages which are; unconcerned. informational, personal. management, consequence, collaboration, and refocusing. Studies have shown that concerns levels are experienced in sequence [2]. A study done by Fuller [11] had 5 stages for implementing an innovation which are; 1-Awareness of innovation, 2- Awareness of information level; 3- Concern for self, 4- Concern for teaching, and 5- Concern for students. Kotler and Armstrong also came up with 5 stages for consumer adoption of a new product. These are; awareness, interest, evaluation, trial, and lastly adoption [12]. The CBA model's stages 0-2 focus on the educator's self- interests; stage 3 on the task at hand (implementation of Education 5.0); and stages 4-6 are on the impact of the change (from Education 3.0 to Education 5.0). Fig. 1 shows a summary of these stages more clearly.

3. RESEARCH METHODOLOGY

3.1 Design

This study adopted Saunders et al. [14]'s research onion design. Interpretivism was adopted because of the nature of the study's

research questions. An inductive approach was also adopted because of the small sample size, the nature of the study which sought to assess educators' level of concern towards the adoption of Education 5.0, and limited generalisability since it is a case study. An inductive approach which is explained as reasoning from narrow to broad was also chosen because no theory was being developed, hypothesized, and tested [14]. The educators' levels of concern on the adoption of Education 5.0 were measured using the CBA model. Descriptive statistics were used for data analyses. The study adopted a cross-sectional time horizon since its focus was on the current situation. A homogeneous sampling technique was employed to select 28 lecturers who responded to questionnaires.

3.2 Population of the Study

The population for the study had 30 lecturers coming from a total of three faculties. Lecturers formed the population because they are the ones who are directly involved in the implementation of Education 5.0 in universities. The university under study was new having been established in year 2018, hence, the small complement of lecturers and faculties.

3.3 Sample and Sampling Techniques

A sample of 28 lecturers was determined using Kreicie and Morgan [15]'s table for determining sample size from a given population. Purposive sampling which is a non-probability sampling method used to deliberately choose a sample based on certain characteristics of the population and the objective of the study was used in this study [16]. This study used homogeneous purposive sampling because the researcher concentrated on educators and not all employees of the university. This was because educators the ones directly involved in the are implementation of Education 5.0 hence their inclusion in the sample for the study.

3.4 Research Instrument

A survey using 35 questionnaire items adapted from the CBA model was used to collect data from the sample of 28 lecturers. Data was analysed to measure stages of concern among the educators who are implementors of Education 5.0. Five items per stage were used to determine the level of concern among the educators. The seven levels of concern being unconcerned, informational, personal, management, consequence, collaboration, and refocusing (see Fig. 1). These levels could be grouped as self, task, and impact reflecting whether the educators are concerned about their self-interests, or the task at hand in this case, the implementation of education 5.0, or the impact of Education 5.0. The items were not arranged according to these levels on the questionnaire, but they were later grouped for data analysis. Below are the items that were adapted from the Concerns-Based Adoption model to measure education 5.0.

3.5 Data Collection

A survey using questionnaires was used for data collection. The researcher then completed a score sheet using the responses from the questionnaires. Demographic data on gender, age, education level, work experience, faculty and department were also collected, coded and captured on the score sheet. Data on stages of concern was coded using Likert scale of 0 to 3. Averages for each level were used for the assessment of stages of concern by using composite scales that were then interpreted using Table 1. Standard deviation for each stage of concern was also calculated to determine variations among the educators' level of concern.

3.6 Reliability and Validity

Reliability and validity for the instrument was not re- tested since the creators of the stages of concern questionnaire tested it on a large sample of 830 and re-tested on smaller sample of 132 yet the reliability coefficients for all the items remained in the range of 0.64 to 0.86 [17]. Other authors such as Van den Berg and Vandenberghe as cited in George, Hall, and Stiegelbauer, [17] also used it on sample of 1585 and the reliability coefficients were all in the range of 0.73 to 0.86. Six other authors who used the same instrument had coefficients within the acceptable ranges [17]. The Cronbach's alpha coefficient of .7 and above being an acceptable value [18]. Independent investigations of the reliability and validity of the Stages of Concern scores generally have concluded that the fundamental model is valid [17]. With this background, the reliability and validity of the instrument was then assumed.

3.7 Missing Data

A total of four questionnaires had missing data and no respondent had more than two items missing. Averages for the remaining line items with missing data were used. The missing data was considered insignificant since missing data was below 5% of the total data set and was randomly distributed [19].

3.8 Data Analysis

The seven stages of concern were analysed using the following items:

- Stage 0 was measured by items 3, 12, 21, 23, and 30.
- Stage 1 was measured by items 6, 14, 15, 26, and 35.
- Stage 2 was measured by items 7, 13, 17, 28,and 33.
- Stage 3 was measured by items 4, 8, 16, 25, and 34.
- Stage 4 was measured by items 1, 11, 19, 24, and 32.
- Stage 5 was measured by items 5, 10, 18, 27, and 29.
- Stage 6 was measured by items 2, 9, 20, 22, and 31.

The means for the five items in each stage were calculated and these were used to calculate the composite mean and standard deviation for each stage of concern. A high mean meant high concern on that stage and a low mean meant low concern on that stage. A high standard deviation meant large variations among the educators' level of concern while a low standard deviation meant little variations among the educators' level of concern.

Table 1. Criteria for interpreting the stages of concern of educators

Likert scale range	Interpretation
0-0.49	Irrelevant/No concern
0.5-1.49	Little/low concern on that stage
1.5-2.49	Moderate concern on that stage
2.5-3	High concern on that stage

4. DATA PRESENTATION AND ANALYSIS

4.1 Demographic Profiles of Educators

The findings reflected that 65% of educators were males and 35% female. The majority (65%) of educators were young adults aged below 40 years while only 3% of educators were above 56 years of age. More than half of the educators had a masters' degree and more than a third had a doctoral degree. There was an almost even distribution of the educators basing on years of work experience with each category not having more than 23% and not less than 13%. There was a fairly balanced representation in terms of faculty and department of the educators in this study.

There were more young educators at the university under study than old ones probably because the university is new and is in its infancy. Since it is new, the lecturer recruitment process is still on going and chances of having young lecturers than old ones are higher because of Zimbabwe's unemployment rates. The old lecturers would be reluctant to move from well-established universities to a new one while young but jobless lecturers would be pleased to be at least employed no matter the environment.

The gender imbalance of educators might have been due to the Zimbabwean culture which gives women more responsibilities outside their profession. Women's gender roles include taking care of their families especially children. This could have caused a slow movement of females up the professional ladder.

Most lecturers at the university had masters' and doctoral degrees while only two are professors. This could be because according to ZIMCHE standards, university lecturers are to have masters' or doctoral degrees. Having a postdoctorate or being a professor is an added advantage of which most lecturers had not yet gone that extra mile.

4.2 Research Question: What are the Stages of Concern of Educators towards the Adoption of Education 5.0?

Table 2 shows the stages of concern mean scoresand standard deviations.Stage 0 scores provides an indication of the degree of interest in and engagement with the innovation in comparison to other tasks, activities, and efforts of the respondents [17]. A low score on stage 0 indicates that Education 5.0 is of high priority and central to educators while a high score indicates that there are a number of other initiatives, tasks and activities that are of concern to him/her. Stage of concern 0 had (M=1.52, SD=0.31); stage 1 had (M=1.96, SD=0.4); stage 2 had (M=2.06, SD=0.24); stage 3 had (M=1.65, SD=0.10); stage 4 had (M=1.90, SD=0.24); stage 5 had (M=2.04, SD=0.45); and stage 6 had (M=1.49, SD=0.30).

High standard deviations were noted for stages 1 (informational) and 5 (collaboration) meaning that the educators had large variations on how they scored for these two stages of concern. The lowest standard deviation was on stage 3 (management) meaning that the educators had almost similar scores for this stage of concern. This, therefore suggests that educators greatly differ on their informational and collaboration concern pertaining the adoption of education 5.0 while their concerns on its management are almost the same. The large variations in the educators' level of concern on the informational stage could be explained by Roger's innovation diffusion theory which states that information on how, why and at what rate innovation ideas moves in a social system vary [20].

Stage of concern	Description	Level of concern	Mean score	Std. deviation
0	Unconcerned	Self	1.52	0.31
1	Informational		1.96	0.40
2	Personal		2.06	0.24
3	Management	Task	1.65	0.10
4	Consequence	Impact	1.90	0.24
5	Collaboration		2.04	0.45
6	Refocusing		1.49	0.30

Table 2. Stages of concern mean scores

A moderate mean score of 1.52 at stage 0 therefore indicated that educators' interest on Education 5.0 is somehow shared with other tasks and activities. This could be explained by the current economic situation in Zimbabwe where the majority of people are involved in other activities outside their work place to try and supplement their incomes, lecturers are not an exception. This divided attention could have caused this moderate score at stage 0.

Stage 1 (informational) scores provides an indication that educators need to know more about Education 5.0. Information about what Education 5.0 is all about, and what its adoption involves will be sought at this stage. A high mean of 1,96 at stage 1 therefore indicated that educators are concerned with knowing more about Education 5.0.

Stage 2 (personal) scores provides an indication of the self-concerns that educators have on Education 5.0 adoption. Respondents with high scores at this stage show that their most concerns are about their status, rewards, and what effects the adoption of Education 5.0 will have on them. This stage had the highest mean score among the educators, implying that the educators were mostly concerned with how the adoption of Education 5.0 would affect them personally. The self-interest concept is supported by the agency theory which states that agents have self-interest that they would seek to fulfil first before the interests of the organisation and its shareholders/owners [21]. Lecturers are the agency in this case, seeking to fulfil their own interests even at the expense of the university and its students.

Stage 3 (management) scores provides an indication of the concerns that educators have about the management of Education 5.0 as a curriculum reform. This includes time management, resource management, and the other logistical aspects of Education 5.0 adoption. The concern is mainly on the task at hand in this case, Education 5.0 adoption. A moderate mean score of 1.65 at this stage therefore indicated that the educators' concern on the adoption of Education 5.0 which is the task at hand is moderate.

Stages 4 (consequences), 5 (collaboration), and 6 (refocusing) fall under the impact level of concern. At stage 4, educators focus on the impact Education 5.0 adoption on students in their immediate spheres of influence. They consider such things as the relevance of the curriculum reform on students, evaluation of students outcomes, and the changes needed to improve student outcomes [17]. A high mean of 1.90 at stage 4 therefore indicates that the educators had a high concern on how Education 5.0 would affect their student learning.

Stage 5 scores provides an indication of the concerns that educators have in terms of collaborations with others on the implementation of Education 5.0. This might involve how other institutions have implemented it and how the university can tap from others' experiences. These shared experiences could be among different departments, lecturers in the same department, across universities or even internationally. The educators had their second highest mean of 2.04 at this stage. This suggest that the educators were very willing to collaborate with others on the implementation of Education 5.0.

The last stage which is stage 6 provides an indication of the concerns that educators have on exploring ways to reap more universal benefits from the innovation (Education 5.0), including the possibility of making major changes to it or replacing it with a more powerful alternative [17]. A low mean of1.49 among the educators indicated that they had little concern on how Education 5.0 could be revised, modified, improved, supplemented, enhanced or even replaced. This is supported by Kotler [22]'s five stages for adoption which are awareness, interest, evaluation, trial, and adoption. For educators to be concerned about improving Education 5.0, they need to have tried it and accepted it first, meaning stage 6 is the last stage that they will go through. This then explains why the educators' concern intensity was least at this stage in comparison with other stages.

The educators had their highest intensity of concern under stage 2 (personal), followed by stage 5 (collaboration), and their least concern on stage 6 (refocusing), followed by stage 3 (management). These findings showed that these educators were on the self-level of concern, much concerned about how they would personally be affected by Education 5.0 and least concerned about the task at hand, which is the implementation of Education 5.0. These results are supported by the consumer adoption process which states that consumers pass through five stage for them to adopt a new product, in this

case Education 5.0 is the product. The stages have awareness and interest as the initial stages before adoption [12]. This then explains the educators' self-interest before adoption. The educators' concern was also high on the impact of Education 5.0 adoption on their students, other lecturers, other departments and other universities.

5. CONCLUSIONS AND RECOMMENDA-TIONS

5.1 Conclusions

The high intensity scores of educators' concern at the self-interest level and at the consequences stage suggest that educators are more worried about how Education 5.0 adoption would affect them personally and also their significant others, students being part of this group. It is expected of educators to be concerned about how their students will be affected because students are their most valued client. Lecturing exist because there are students to teach, hence their concern on the product offer which is Education 5.0 in this case.

5.2 Recommendations

The following recommendations were based on the results of the study. These recommendations are for practice and also for future studies.

- 1. Recommend that seminars on Education 5.0 be done to lecturers since they are directly involved in its implementation.
- 2. On the stages of concern, the stages with high intensity should be investigated and the concerns be addressed. Those stages with low intensity concern should also be investigated if the low scores are caused by low interest in Education 5.0 or if they are because most of their concerns have been addressed.
- 3. Administrators could reduce other tasks and activities given to educators such that they put maximum effort in the implementation of Education 5.0.
- Open ended questions, individual interviews and focus group interviews could be done in the future and results be compared to this study results for triangulation purposes.
- This study could be repeated after some time in order to have a longitudinal view of the study. This would reveal if there are changes in the educators' stages of

concern on Education 5.0 adoption over time.

CONSENT AND ETHICAL APPROVAL

Permission to carry out the study was sought and granted by Zimbabwe's Ministry of Higher and Tertiary Education, Science, and Technology Development as well as the university before distribution of questionnaires for data collection. The ethical considerations on informed consent, maintenance of privacy, anonymity and confidentiality, avoidance of harm, and maintenance of academic integrity were observed. All the respondents were above 18 years of age, hence their signing of the informed consent form meant that they were voluntarily agreeing to participate in the study.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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QUESTIONNAIRE

Measuring Implementation in Universities: THE STAGES OF CONCERN QUESTIONNAIRE

0	1	2	3
Irrelevant	Not true of me now	Somewhat true of me now	Very true of me now

Circle One Number for Each Item

1 2 3 4	I am concerned about students' attitudes toward Education 5.0. I now know of some other approaches that might work better. I am more concerned about another innovation. I am concerned about not having enough time to organize myself each day.	0 0 0 0	1 1 1 1	2 2 2 2	3 3 3 3
5 6 7	I would like to help other faculty in their use of Education 5.0. I have a very limited knowledge of Education 5.0. I would like to know the effect of reorganization on my professional status.	0 0 0	1 1 1	2 2 2	3 3 3
8	I am concerned about conflict between my interests and my responsibilities.	0	1	2	3
9 10	I am concerned about revising my use of Education 5.0. I would like to develop working relationships with both our faculty and outside faculty using Education 5.0.	0 0	1 1	2 2	3 3

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11	I am concerned about how Education 5.0 affects students.	0	1	2	3
12	I am not concerned about Education 5.0 at this time.	0	1	2	3
13	I would like to know who will make the decisions in the new system.	0	1	2	3
14	I would like to discuss the possibility of using Education 5.0.	0	1	2	3
15	I would like to know what resources are available if we decide to adopt	0	1	2	3
	Education 5.0.				
16	I am concerned about my inability to manage all that Education 5.0	0	1	2	3
	requires.				
17	I would like to know how my teaching or administration is supposed to	0	1	2	3
	change.				
18	I would like to familiarize other departments or persons with the	0	1	2	3
	progress of this new approach.			-	-
19	I am concerned about evaluating my impact on students.	0	1	2	3
20	I would like to revise Education 5.0's approach.	0	1	2	3
21	I am preoccupied with things other than Education 5.0.	0	1	2	3
22	I would like to modify our use of Education 5.0 based on the	U	1	2	3
22	experiences of our students.	•		•	2
23	I spend little time thinking about Education 5.0.	0	1	2	3
24	I would like to excite my students about their part in this approach.	0	1	2	3
25	rain concerned about time spent working with non-academic problems	U	1	2	3
26	I would like to know what the use of Education 5.0 will require in the	0	4	2	2
20	immediate future	U		2	3
27	I would like to coordinate my efforts with others to maximize Education	0	1	2	3
	5 0's effects	Ŭ	•	-	Ū
28	I would like to have more information on time and energy	0	1	2	3
_•	commitments required by Education 5.0.	•	-	_	•
29	I would like to know what other faculty are doing in this area.	0	1	2	3
30	Currently, other priorities prevent me from focusing my attention on	0	1	2	3
	Education 5.0.				
31	I would like to determine how to supplement, enhance, or replace	0	1	2	3
	Education 5.0.				
32	I would like to use feedback from students to change the program.	0	1	2	3
33	I would like to know how my role will change when I am using	0	1	2	3
	Education 5.0.				
34	Coordination of tasks and people is taking too much of my time.	0	1	2	3
35	I would like to know how Education 5.0 is better than what we have	0	1	2	3
	now.				

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