Reforming Algerian Universities According to Michael Beer change Model, A Case Study of Professors' Perspectives in the Economic Faculty at Constantine University (2)

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Abstract:

In this study we try to show the relevance of one of the change managements models, Michael beer's model, which is in our opinion one of the best for the specificity of Algeria educational system. A questionnaire was used as a study tool where the researchers distributed the questionnaire to a sample of teachers (37) in the university of Constantine 2. And we also conducted several interviews with some of the teachers to analyse and interpret certain results.

The study revealed a few results, the most important results are:

- Higher education reform was poorly evaluated by the teachers.
- The presence of a statistically significant difference to higher education reform from the teachers' point of view due to the variables of seniority.
- No statistically significant difference to higher education reform from the teachers' point of view due to the variables of gender.

Keywords: change management, higher education, reform, LMD system.

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I- Introduction

Higher Education (HE) is one of the most powerful investments that's effects the economic development of nations and provides many opportunities for individuals, and promote the cultural diversity (Souleh, 2017, p. 33). The relevant literature of the last decade shows that HE has thoroughly transformed, HE finds itself in a new era and environment which it is confronted with multiple challenges in many aspects. In order to be able to raise the quality of HE, the Algerian universities has been marked by major policy reforms since the independence. The last one is LMD reform in 2004/2005.

Higher education sector in Algeria suffers from many problems, and the faded quality withinside the Algerian (HE) sector is incontestable. The introduction of LMD reform was not proceeded by adequate evaluations of the state of HE in the country it also did not take into consultations and dialogue with those concerned on the ground. Regardless of what the relative merits of this move were, we must seriously question the nature of any potential reforms, and do so in light of the wider implication of the LMD system on the intellectual and socio-economic development of society. Some of the most serious of these implications, which we will address in this paper, are defining change management and some of the most used models. And highlight Michael beer change model. From that basis, we will try to give a redefinition of the higher education reform experience by the window of beer change management model in order to enhance the foot to better and more consistent results.

- **Problem of the study:**

Based on that we can put the following problematic:

How to successfully reform Algerian universities basing on Michael Beer change model?

based on this problematic we try in this study to answer the following questions:
- Why there is a necessity for change in Algerian higher education system?
- What's Michael beer change model?
- what is the possible level of implementation of Michael beer change model in the Algerian university?
- Are there a statistically significant differences to higher education reform from the teachers' point of view due to the variables of gender, seniority?

- **Hypotheses of the study:**

- The necessity for change in the Algerian higher education system arises from the need to adapt to global advancements, enhance quality and relevance, and foster research and innovation

- The Michael Beer change model is a framework for planned organizational change that emphasizes strategic clarity, shared mindset, supportive culture, capability building, disciplined process, and leadership effectiveness. It provides a structured approach to drive successful change initiatives by aligning organizational elements and fostering employee engagement

- The implementation level of the Michael Beer change model is currently inadequate.

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- There is no statistically significant difference to higher education reform from the teachers' point of view due to the variables of gender.

- There is a statistically significant differences of higher education reform from the teachers' point of view due to the variables of seniority

- **Methodology of the study:**

Based on the nature of the study, we used the analytical descriptive method that relies on collecting facts and information, then comparing, analyzing, and interpreting them to achieve accepted results.

- **Study tools:**

To process the analytical sides of the study, we collected the primary data through a questionnaire designed for this. Then, we input the questionnaires on SPSS.

- **Previous studies:**

Mohamed Dahia and mohamed lamine hassab entitled **"Measuring the extent adopt of the Organizational Change Dimensions from the Professors point of view (field of study: Faculty of Economics of Laghouat University)"**

The study aimed to measure the extent to which the dimensions of organizational change were adopted at the Algerian University, from the point of view of the professors of the Faculty of Economics at the University of Laghouat.

The study concluded that there are substantial differences with statistical significance at a significance level less than 0.05 that expresses the extent of perception Dimensions of organizational change to effect change at the Faculty of Economic.

Mahmoud Hamed Al-Muqaddadi and Saleh Suwailm Al-Sharafat study entitled "**Teachers Resistance to change: Reasons and Strategies to Reduce it from Al Mafraq Borough Directorate Teachers Viewpoints"**.

The purpose of this study was to identify the attitudes of teachers at Al Mafraq Borough Directorate of Education towards reasons for and strategies of decreasing resistance to educational change, and the relationship of these attitudes with some personal and work variables. A questionnaire was used as the data collection tool in the study.

The study found that the most important reasons as why teachers resist change are: loss of the sense of participation in the process of change, the sense of teachers that change is imposed on them by force and by outside parties, their fear of losing their accustomed routines,

Regarding studies on Michael Beer's model, we did not find any research specifically addressing this model in the academic field. Therefore, we attempted to explore the foundational aspects of the topic through various bibliographic sources. However, we did come across several articles that discuss change models, but only a few of them specifically address these models in the context of university reforms.

1. The theoretical framework of the study.
1.1. Reform higher education: a national necessity:

Like all other countries, Algeria has been confronted with the challenge of the globalisation of the university educational system, in 1962 Algeria had only three higher education establishments (Algiers, Oran and Constantine) with less than 2000 students. After the independence in (1963) the Algerian government began to rebuild its country and its educational system. The university network represented 109 institutions in 2020 and

more than 1.500.000 students (MERIC-Net, 2019, p. 2). For a better understanding the next table shows the evolution of students enrolled in the period 1962-2020.

Table 01: the evolution of students enrolled in the period 1962-2020

Year	1962/63	1969/70	1979/80	1989/90	1990/00	2009/10	2010/11	2019/2020
Student enrolment in graduation	2725	12243	57445	181350	407995	1034313	1077945	1469984
Student enrolment in post-graduation	156	317	3965	13967	20846	58975	60617	76259
Total	2881	12560	61410	195317	428841	1093288	1138562	1546243

Source: (**Souleh, 2017, p. 35**).
and (**MESRS, 2020, p. 13**)

With the increased number of graduated students has decreased the quality of education because of the lack of confidence in the public and economic role of the university to effect meaningful transformation (Souleh, 2017, p. 35)

Broadly speaking, Algeria's higher education sector has been marked by two major policy reforms. The most recent one is the adoption of the LMD system Implemented since 2004/2005. When demographic reality was becoming more and more strong. Massification was the main pattern for the reforms, and unfortunately quality didn't follow as predicted. And one of the major aspects of the degradation of HE quality is the scientific production which give some hints about the level of the higher education system (Oussama, 2016).

The Algerian university has experienced instability in the research system and at the actors themselves with the hight frequency in institutional changes after independence (Ait, 2021, p. 771). If we take a look at the scientific production of, HE, and based on the SJR ranking (table 02), Algeria comes in the 57th position from a 240-ranking country, Morocco comes after, and Algeria is still losing in rank almost every year which is far from suitable, and a major change need to be done in order to regain a proper HE system and more quality oriented.

Table 02: Country ranking based on SJR (2021).

Rank	Country	Documents	Citable documents	Citations	H index
01	United states	13817725	11986435	384398099	2577
02	China	7454602	7229532	78201759	1010
57	Algeria	84192	80961	725764	202
58	Morocco	83349	77388	794014	222

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With such high number of students and the global crisis in higher education institutions, and also the facts that Algeria isn't really making a step forward in term of quality. And the idea that LMD system will reinvigorate the HE sectors, and an inevitable consequence of globalisation. such reform was unavoidable, and puts Algerian HE sectors in subordination to European intellectual and economic development, and not respond to Algerian specificity without a genuine critical discussion of how the state of the Algerian HE sector react and relates to this global crisis (Oussama, 2016). So, reform HE is a national necessity.

1.1.1. What is change management

"Change management emerge in the 1970s as a synthesis of ideas from business and psychology" (Duffield & Royals, 2021, p. 34), based on the work of the early theorists, change has been conceptualized in two defined ways. "The first sees change as a rational, strategic process where the organization chooses a new course of action and adapts to change. The second approach views change as an evolutionary selection, where organizations typically resist the change happening around them" (Teczke, Bugubayeva, & Sansyzbayevna, 2017, p. 196). Which means change can be either be enacted or undergo.

change management can be defined also as a "comprehensive, cyclic, and structured approach for transitioning individuals, groups, and organizations from a current state to a future state with intended business benefits. It helps organizations to integrate and align people, processes, structures, culture, and strategy" (Project Management Institute, 2013, p. 7).

according to Nickols the thinking of change management meaning gives four basic definitions (Nickols, 2016, p. 1)

- the task of managing change.
- An area of professional practice.
- A body of knowledge.
- A control mechanism.

1.1.2 Change management in higher education an introductory literature review:

To set the stage for the current topic, we need a literature review to provide an introduction to change management in HE, which can be used to handle the intended meaning of change management used in this paper.

the literature of the last decade showed that "characteristics and trends in universities show that university education has thoroughly transformed" (Vlachopoulos, 2021, p. 1), still "universities are peculiarly resistant to change and managing change in universities is perhaps the most daunting challenge facing senior managers in organizations today" (Brown, 2013, p. 89).

Our focus in this paper is on planned, and process focused, approaches to change,

Herbst presents change management as a process of identifying where we are, and defining where you want to go determining a planned route between, "planned approaches are established methods for managing change and, as seen through Herbst's classification system, have much used in HEIs" (Sheehan Pundyke, 2020, p. 1)

1.2. Change management models

Kurt Lewin model

One of the earliest efforts made in the domain of change management as a planned approach came from Kurt Lewin (Motab, 2016, p. 321), "even though the world has changed ever since Lewin has published the model in 1947" (Teczke, Bugubayeva, & Sansyzbayevna, 2017, p. 196). The three-step approach by Kurt Lewin suggest that understanding change needs a perfect comprehension of the concept of stability, highlighting two important factors in the process of change, factors that push for change and factors that aimed for stability, if those forces are equal logically the organization remain stable. Lewin explained organizational change by using the example of a block of ice changing shape, and developed the three-phase change process: unfreezing-transition-refreezing (Vlachopoulos, 2021, p. 3). Unfreezing means to redefining the old ideas and practices, transition is the step where these new ideas and practises are learnt, and finally refreezing means integrate what has been learned.

Kotter model

In the 1990s, more and more models began to focus on the people side of change. One of the most famous models that emerged in that period was developed in (1996) by Kotter (Duffield & Royals, 2021, p. 35) , who described eight-stage change process (Kotter, 2018, p. 9):

- Create a sense of urgency
- Build a guiding coalition
- Form a strategic vision and initiatives
- Enlist a volunteer army
- Enable action by removing barriers
- Generate short term wins
- Sustain acceleration
- Institute change Effectively

Kotter eight step model put a clear framework of the role of human resource in the change process (Wheeler & Holmes, 2017, p. 280). "The Kotter model provides a roadmap for moving through a change and is flexible enough to be used to frame a strategy to implement specific changes in any sector or organisation" (Duffield & Royals, 2021, p. 35).

(ADKAR) Model

The ADKAR Model, specializes in human change adaptation. ADKAR is an acronym that represents the 5 tangible and concrete consequences that people want to reach and to achieve and it represent: awareness, desire, knowledge, ability and reinforcement (Bekmukhambetova, 2021, p. 103).

Leadership. a common subject in change management literature, especially to mobilize people into a change and commit to the results, they need to see organisational leaders committed as well. In the Prosci model, the leader plays a key role in implementing a change. Like Kotter model, this model describes specific stages in order to increase the chance of change being successful. These stages are described by the acronym ADKAR like the following (Procsi, 2021):

- Awareness- to the need for change
- Desire- to support the change
- Knowledge- of how to change
- Ability- to demonstrate skills and behaviours
- Reinforcement -to make the change stick

1.3. Michael beer six-step change model

Michael beer (1990) and his colleagues in a Harvard business review article, "why change programs don't produce change", developed a model which states that changes in attitudes lead to changes in behaviour (change management, p 429), "which repeated by many people, will result in organizational change" (Beer, Russel, Spector, 1990, p 5). Michael beer put a sequence of six overlapping steps which is called 'the critical path'. The path develops a self-reinforcing cycle of commitment, coordination and competence. The sequence of steps is important because activities appropriate at one time are often counterproductive if started too early. Timing is everything in management of change (Beer, Eisenstat, & Spector, 1990, p. 161). And the steps are like the following (Beer, Eisenstat, & Spector, 1990, pp. 161-163):

- Mobilize commitment to change through joint diagnosis of business problems. The starting point of any change is to clearly identify the problem. And try to guide people through a shared diagnosis of the problem, and the solution that can be provided. It's very important to mobilize the first step of commitment to begin any change process. And this is where conducting LMD system didn't take in consideration when first used in HE, especially with the teachers the main actors of its success.

- Develop a shared vision of how to organize and manage for competitiveness. After that a group of people in the university is committed to a set of diagnosis, the leader can lead the university employees toward a task-aligned vision of the university, even if it defines new responsibilities and roles. Without changing the formal structures to encounter less resistance and will create interdependent functions at all levels of the university.

- Foster consensus for the new vision, competence to enact it, and cohesion to move it along. Even with a new and shared vision isn't enough to overcome the resistance to change. people can be enthusiastic neutral or even antagonistic, and not all of them can have the skill required for the new change. This where strong individual and strong leadership is important, and where the teachers need to be in the same vision in order to accept the new perspectives.

- Spread revitalization to all departments without pushing it from the top. With new responsibilities and roles new ad hoc teams [1]take place in the university, when this happens the staff departments must interact with it. This teams can't be effective unless the hole departments are organized in a way to support their role. Sometimes its means rethink the role of the department and their authority in the organization.

- Institutionalize revitalization through formal policies, systems, and structures, in step five the right people are in the right place, and the university is up and running. Here it's time to institutionalize the changes, doing it before the previous steps will result more resistance. And here the university need to take information from the ad hoc teams and create new information system aligned to the new information's.

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[1] Ad hoc team: A group of people that are brought together to achieve common goals for the duration of the task but who lack the experience of training together as a team

- Monitor and adjust strategies in response to problems in the revitalization process. The main goal this change model is to create a learning organization, effecting the people and their behaviour to learn how to learn. And it's important that the commitment to change is shared by many people as possible.

The figure 01 summarise Michael beer model.

Figure (01): Michael beer six step change model.
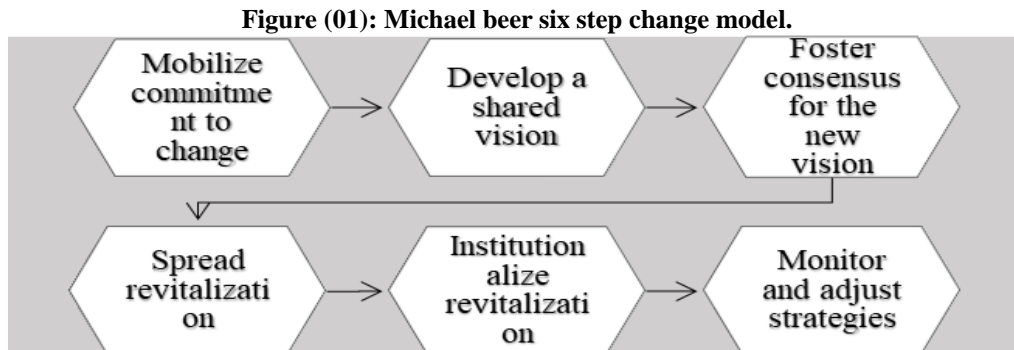
Source: Prepared by the researchers

1.3.1 Why Michael beer change model in HE:

Change management models are concepts, theories, and methodologies that provide an in- depth approach to change. They aim to provide a guide to making changes, navigating the transformation process, and ensuring that changes are accepted and put into practice.

With that been said we think that Michael beer model is a very good way to improve quality of higher education. And the prime factor is that beer model was made of a simple idea or rather a question "why change programs don't produce change? And that is the main goal of our paper. Algeria many times had to use prefabricated programs in order to face the many problems in HE system. And beer model was built on the fallacy of programmatic change.

Secondly beer model has a wild view of what change is and what change should be and that can give a lot of perspective for the next change to come in Algeria higher education, and don't give many precisions on how it should be done which in our mind we think it's a great asset to overcome the past change failure in HE.

Thirdly, beer model focusses on human assets, and the main purpose of the model is to change people behaviours to enact a saucerful change into the organization in our case higher education.

Even with all the positives this model gives, and can be really valuable for a successful change process, we need to point that this model has some negative aspects, first beer model was used the first time on corporation and companies, and not for higher education, which add the difficulty of taking in consideration the specificity of HE. Secondly beer model isn't used that much in literature review as a main model in change, because there are more models that's gives more detail in the subject. But we think that the less details are in fact the main force of using this model in order to put a successful change effort.

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2. Research design

2.1 Target population

The target population consisted of all teachers, who were appointed by the faculty of management and commerce, at Mentouri 2 Constantine university. The target population considered only the tenured teachers; as these have certain guaranteed rights (salary, promotion, scientific leaves; etc) that protect them from losing their jobs for unsubstantial reasons, and have a clear vision of the higher education environment.

2.2 Sample procedure and sample size

The participants of the study were drawn from a non-probability homogenous purposive sample.

The participants (n=37) share some qualities that set them apart. the participants are serious, fair, enthusiastic, accessible, involved and committed to their job and the university as a whole. The 37 teachers where all invited individually to participate in the survey questionnaire by email and face-to-face. The study yielded a response of 37 of the 38 surveys, one incomplete survey response was discarded.

2.3 Data collection instruments

Data collection too place by means of an online and face-to-face survey. The questionnaire was used to determine the of implementation of Michael beer change model in the Algerian university

The first section measured personal information. This section has 2 questions (sex and year of experience) because we wanted to focus on those two factors in particular; the second section measured the six key variable of Michael beer model (). The third section is about HE reform. All constructs were rated on a five-point Likert-type response scale, ranging from strongly disagree, disagree, somewhat agree, agree, strongly agree. All statistical analysis was performed through the help of SPSS.

In order to be able to evaluate the degree of approval, we divided the scale in 5 categories as shown in the table below.

Table 03: Value of the weighted mean and the degree of approval.

The weighted mean	Degree of approval
[1 - 1.8[	strongly disagree
[1.8 - 2.6[	disagree
[2.6 - 3.4[	somewhat agree
[3.4 - 4.2[	agree
[4.2 - 5[	strongly agree

Source: Prepared by the researchers

2.4. Validity and Reliability of the instruments

For reliability purposes, a pilot study was conducted. Three teachers were given printed version of the questionnaire for the trial. The length of the questionnaire was noted during the pilot study and this helped for the modification of the last version. To determine reliability of the questionnaire, the alpha value was computed for each factor using SPSS version 22. The Cronbach alpha shown in the table below were greater than 0.60 indicating acceptable internal consistency.

Table 04: reliability statistics.

Variables	Sentence Numbers	Cronbach Alpha
Mobilize commitment to change	04	0.823
Develop a shared vision	03	0.859
Foster consensus for the new vision	04	0.905
Spread revitalization	04	0.876
Institutionalize revitalization	04	0.925
Monitor and adjust strategies	03	0.860
Beer model implementation	24	0.968
Higher education reform	11	0.931
questionnaire	35	0.970

Source: Prepared by the researchers depending on SPSS outputs

2.5 Demographic characteristics of the respondent

Table 05: characteristics of the study sample members.

Statement	Category	Frequency	Percentage
gender	Male	17	45.9
	Female	20	45.1
	Total	37	100
Years of service	Less than 5 years	6	16.2
	Between 5 and 10 years	15	40.6
	More than 10 years	16	43.2
	total	37	100

Source: Prepared by the researchers depending on SPSS outputs

2.6. Discussion of results

2.6.1. degree of implementation of Michael beer change model

responding to the problematic of the degree of implementation of Michael beer change model in the Algerian university we take a look at the results in the table (07) below.

Table 07: degree of implementation of Michael beer change model in the university.

questions	mean	Standard deviation	Degree of approval
Q1	2.46	1.120	disagree
Q2	2.32	1.107	disagree
Q3	2.24	0.983	disagree
Q4	2.51	1.117	disagree
Mobilize commitment to change	2.38	0.871	disagree
Q5	2.11	0.809	disagree

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Q6	2.41	1.117	disagree
Q7	2.16	0.986	disagree
Q8	2.43	1.119	disagree
Develop a shared vision	2.22	0.8644	disagree
Q9	2.38	0.953	disagree
Q10	2.62	1.063	somewhat agree
Q11	2.54	1.095	disagree
Q12	2.41	0.832	disagree
Foster consensus for the new vision	2.49	0.934	disagree
Q13	2.43	0.853	disagree
Q14	2.51	0.989	disagree
Q15	2.65	0.824	somewhat agree
Q16	2.51	0.961	disagree
Spread revitalization	2.5	0.745	disagree
Q17	2.19	1.050	disagree
Q18	2.32	1.203	disagree
Q19	2.05	1.053	disagree
Q20	2.22	0.947	disagree
Institutionalize revitalization	2.27	0.967	disagree
Q21	2.43	1.042	disagree
Q22	2.57	1.237	disagree
Q23	2.46	1.120	disagree
Q24	2.68	0.973	somewhat agree
Monitor and adjust strategies	2.40	0.956	disagree
Six step model variables	2.38	0.791	disagree

Source: Prepared by the researchers depending on SPSS outputs

It's obvious from the table (07) that almost all answers from the teachers' point of view about Michael beer model change model steps were answered by disagree, with a total mean of (2.38), and its recurrent in all the six steps (2.38, 2.22, 2.49, 2.5, 2.27,), and the following Q10, Q15, Q24 questions (see appendix), had a mean above 2.6 which represent "somewhat agree" in the the degree of approval. which really gives a statement on what teachers think about the implementation of change management steps, and further change culture. Michael beer steps more than a model reflect what should be in the university in order to embrace any change. And that in our opinion gives some hints on the fallacy of the LMD system.

2.6.2 higher education reform

The table (08) shows the results of higher education reform by the teacher's point of view

Table 08: higher education reform success degree of approval.

questions	mean	Standard deviation	Degree of approval
Q25	2.54	1.238	disagree
Q26	2.49	1.193	disagree
Q27	2.78	0.886	somewhat agree
Q28	2.59	1.166	disagree

Q29	2.68	1.029	somewhat agree
Q30	2.65	1.184	somewhat agree
Q31	2.59	1.013	disagree
Q32	2.51	1.346	disagree
Q33	2.62	1.089	somewhat agree
Q34	2.35	1.207	disagree
Q35	2.14	0.976	disagree
Higher education reform	2.54	0.825	disagree

From table (08) we can see that almost all question had a mean corresponding to teachers' disagreement on the reform system in the university, and it reflect the general opinion on the higher education sector, and that from all protagonist. Also, we notice that for Q25 "working mechanism in LMD system increased the quality of scientific production", with a mean of (1.78) represent the strong disagreement of the teachers on the increasement of scientific production, which is aligned with what we highlighted in table (02), where Algeria is 57th in the ranking of countries in term of scientific production and citations. In Q27 "working mechanism in LMD system increased the quantity of scientific production", the mean was (2.68) which reflect "somewhat agree" with the increasement of the scientific production, and that can easily be associate with the huge raise of student's numbers year after year as shown in table (01)

While in Q32 "teachers see that the reform system in Algeria were successful", the mean (1.62) reflects the strong disagreement of the teachers on that statement. And that's is why so many articles in HE quality are still the main subject of many human science articles, and one of the main priorities of the Algerian government.

2.7. Hypothesis testing

The hypothesis Are there statistically significant differences to the availability of change culture from the teachers' point of view due to the variables of gender.

2.7.1. Impact of gender on higher education reform

we used the independent samples T-Test between HE reforms and the variable of gender, the hypothesises are like the following:

- H0: There is no statistically significant differences to the higher education reform from the teachers' point of view due to the variables of gender.
- H1: There is a statistically significant differences to the higher education reform from the teachers' point of view due to the variables of gender.

The table below show the results obtained.

Table 09: t-test for independent samples between HE reforms and gender

Dependant variable: higher education reform	Independent variable: gender				
	Leven test		T-Test		
	F	Sig	T	df	Sig
	0.265	0.610	-0.718	35	0.478

from the table (09) the value of Sig=0.610 from Leven test is higher than 0.05, which means that the members of this sample (male and female) are homogenous, and from the results of the T-Test (Sig= 0.478 > 0.05), we conclude to accept the hypothesis H0 "There are no statistically significant differences to the higher education reform from the teachers' point of view due to the variables of gender" and refute H1.

2.7.2 Impact of seniority on higher education reform

We tested this hypothesis with the ANOVA test, the hypothesises are like the following:

- H0: There is no statistically significant differences of higher education reform from the teachers' point of view due to the variables of seniority.
- H1: There is a statistically significant differences of higher education reform from the teachers' point of view due to the variables of seniority.

The table (10) show the results obtained.

Table 10: analysis of variance ANOVA test between HE reforms and seniority.

Model	Sum of squares	df	Mean Square	F fisher	Sig
between groups	1.024	2	0.512 0.06	8.543	0.001
Within groups	2.037	4			
Total	3.061	36			

Source: Prepared by the researchers depending on SPSS outputs.

From the table (10) (Sig= 0.001<0.05), we conclude that there is a statistically significant differences to the higher education reform from the teachers' point of view due to the variables of gender.

Conclusion

"As summarized by McCaffery, there is no exact method or prescribed formula for managing change" (Sheehan Pundyke, 2020, p. 5), it depends on every situation and every environment each one with their specific variables. Algeria HE system need constant rethinking to enhance the many changes that occur.

This study proposes the importance of fostering a quality-oriented approach in higher education, irrespective of the continuous growth in student numbers. It emphasizes the necessity for substantial sector-wide transformations and underscores the significance of drawing lessons from previous reforms, particularly in terms of enhancing communication among all stakeholders in the education system. Additionally, the study recognizes teachers as crucial drivers for successful change initiatives in the field of education.

We also think that Michael beer change model is one of the best models if we take his major asset, which is the global view of the model without getting in too many details, which is a huge factor to overcome the past change failure with LMD system.

In conclusion, the steps of the Michael Beer change model are crucial as they not only provide a structured approach to change but also serve as key factors in creating and mobilizing people for a successful change process. By following these steps, organizations can navigate change effectively and achieve desired outcomes.

We also found some practical results:

- The implementation of the Michael Beer model in the university has been observed to have a significantly low degree. Additionally, beyond its procedural steps, the model provides a comprehensive diagnosis of the university's change culture, which has been identified as notably deficient.

- The evaluation of higher education reform by the teachers yielded unsatisfactory results, in contrast to the prevailing opinion on the sector and its accomplishments.

- The findings of the study reveal that there is no statistically significant difference in the perspectives of teachers regarding higher education reform based on gender-related variables. This implies that gender does not play a significant role in shaping teachers' views on the reform process. Regardless of their gender, teachers tend to hold similar attitudes and perceptions towards the reform initiatives being implemented in higher education. This suggests that the factors influencing their perspectives are more likely to be related to other personal and work variables rather than gender.

- The study findings indicate the presence of statistically significant differences in the perspectives of teachers regarding higher education reform based on their level of seniority. Specifically, it was observed that as teachers gain more experience in their profession, their level of approval towards higher education reform decreases. This suggests that seniority plays a role in shaping teachers' attitudes and perceptions towards reform initiatives. The reasons behind this finding could be attributed to various factors, such as resistance to change, ingrained practices and routines, or skepticism towards the effectiveness of reform efforts. Further research and exploration are needed to delve deeper into the specific reasons behind the observed relationship between seniority and attitudes towards higher education reform among teachers.

Recommendations:

Based on the analysis presented, the following four recommendations are proposed:

- Emphasize Quality Orientation: The higher education system in Algeria should prioritize quality over the sheer number of students. This entails ensuring that educational standards, curriculum design, teaching methods, and assessment practices are aligned with quality benchmarks to enhance the overall learning experience.

- Enact Major Sector-wide Change: To address the challenges and seize opportunities, a comprehensive and substantial change is needed in the higher education sector. This includes revisiting policies, structures, and processes to foster innovation, improve governance, and enhance the overall effectiveness of the system.

- Foster Effective Communication: Establishing robust channels of communication among all stakeholders within the education system is crucial. This involves promoting dialogue and collaboration between teachers, administrators, policymakers, and students to foster a shared understanding, facilitate knowledge exchange, and ensure collective participation in decision-making processes.

- Leverage Michael Beer's Change Model: Drawing upon the strengths of Michael Beer's change model, organizations should adopt a global perspective that considers the

broader context while implementing change initiatives. Balancing the need for strategic direction with flexibility and adaptation to specific circumstances can help overcome past failures and increase the likelihood of successful change implementation.

By following these recommendations, the Algerian higher education system can embark on a path of continuous improvement, aligning with international standards, and meeting the evolving needs of students, society, and the nation.

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Appendices:

Statements	strongly agree	agree	somewhat agree	disagree	strongly disagree
I- Six step model					
1- Mobilize commitment to change					
1- The university effectively diagnoses various issues that arise within its environment					
2- Various changes are discussed with different professors					
3- professors communicate with each other about the obstacles that arise or may arise in conducting their work					
4- In the university, there is a spirit of progress and change					
2- Develop a shared vision					
5-There is a specialized Team at the university responsible for formulating and developing the future directions of the university					
6-A culture of change is available at the university					
7-A spirit of cooperation and participation is available at the university					
8- The principle of collective before individual is present in the university					
3- Foster consensus for the new vision					
9-A culture of empowerment is available at the university					
10-The professors have the opportunity to suggest their ideas					
11-The professor has the authority to intervene in university affairs					
12- The communication channels in the university are effective					
4- Spread revitalization					
13-The university departments effectively accommodate the requirements of the professors					

14- Professors are not subjected to top-down imposition of decisions					
15- Information is effectively disseminated among diverse departments within the university					
16-There is a collaborative climate between professors and various administrative bodies					

5- Institutionalize revitalization

17-The university exhibits a high degree of flexibility in making decisions					
18-The university possesses the capacity to modify its own laws and regulations					
19-The university relies on the principle of placing the right person in the right position					
20-The possibility of changing the responsibilities and tasks of university employees					

6- Monitor and adjust strategies

21-The university is based on the principle of continuous learning for all its employees					
22-the university has a culture of self-monitoring					
23-The university excels in swiftly addressing various deviations among its employees					
24- There is flexibility in adjusting the tasks and responsibilities of employees					

II- Higher education reform success

25- working mechanism in LMD system increased the quality of scientific production					
26-the LMD system has been implemented at an acceptable pace					
27- working mechanism in LMD system increased the quantity of scientific production					
28-Teaching the modules within one semester is sufficient					
29- The guidelines and regulations regarding teaching and mentoring within the LMD system are well-suited					
30-The allocated balances in the instructional units are appropriate					
31-The student transfer system between years is appropriate					
32- teachers see that the reform system in Algeria were successful					
33-The implementation of the LMD system has led to an improvement in the quality of educational services provided by the university					
34- The student numbers have been appropriately adjusted according to the specializations					
35- The new structure of the LMD system optimally ensures that students receive essential knowledge within the allocated number of years					