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Human Capital Investment Decisions: A Logit Model of Willingness to Attain Professional Teaching Qualifications by Uncertified Graduate Teachers in Harare Province, Zimbabwe

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Abstract:

The education system in Zimbabwe continues to face a shortage of qualified teachers especially in high schools where a bigger proportion of the teachers are holders of first degrees but who lack professional teaching qualifications. Yet there is a perceived general unwillingness by uncertified graduate teachers to invest in attaining professional teaching qualifications. The objective of the study was to find the determinants of willingness by uncertified graduate teachers to acquire professional teaching qualifications. Cross-sectional data were collected from a sample of 87 uncertified graduate teachers selected from a multi-stage cluster sample of high schools. A logit model of possible determinants was estimated. The study found that the majority of high school uncertified graduate teachers were unwilling to train as professional teachers. It was concluded that age, gender, type of degree, cost of training, remuneration, and the desire to work with children are statistically significant determinants of willingness to train as professional teachers. The study recommends that the government should make the teaching profession more attractive by making the remuneration of teachers competitive and comparable to those of other professions. Pay differences between certified and uncertified graduate teachers should be substantially different. The government should also make the cost of training affordable by offering financial assistance to those teachers who intend to train as professional teachers.

1. Background to the Study

The rapid expansion of the education system following Zimbabwe's independence in 1980 hiked the demand of qualified teachers. As part of strategies to alleviate the resultant problem of shortage of qualified teachers, the government allowed unqualified teachers to teach in schools and some for prolonged periods. Unfortunately, this created a false perception that 'anyone' can teach even without undergoing formal teacher training.

According to statistics made available by the Ministry of Primary and Secondary Education, there are currently 73 160 primary school teachers of which 65 547 (89.6%) are qualified and 41 264 secondary school teachers of which 29 661 (72%) of them are qualified. The shortage of qualified teachers has been worsened in recent years by the deteriorating political and economic environment in the country that has ignited a mass exodus of qualified teachers to neighbouring countries especially to South Africa and Botswana. The former Minister of Education, Sport and Culture, David Coltart, put the number of qualified teachers who migrated out of the country between 2007 and 2008 at over 20 000 (Gwaradzimba and Shumba, 2010).

Teachers' conditions of service are comparably better in neighbouring countries than in Zimbabwe (Gwaradzimba and Shumba, 2010; Nyanga, Mpala and Chifamba, 2012). For example, in South Africa a new entry graduate teacher earns about R8 000 (currently about US\$700) compared to US\$419 for a similarly qualified teacher in Zimbabwe. The economic downturn in Zimbabwe means the government cannot afford to pay teachers salaries which are above the poverty datum line, a situation which have left most teachers demoralised. In December 2014, the poverty datum line was pegged at US\$467 for a family of six per month (ZIMSTAT, Dec 2014). Shortage of properly trained and experienced teachers is one factor that has been identified as contributing to high failure rates in schools. Table 1 shows the national pass rates in public examinations for Grade 7, O' Level and A' level from 2007 to 2014.

Year	Grade 7	O' level	A' Level
2007	34.95	14.32	75.71
2008	30.24	14.44	67.43
2009	20.11	19.33	76.88
2010	25.00	16.50	75.99
2011	28.90	19.50	85.20
2012	31.50	18.40	82.90
2013	32.20	20.72	81.58
2014	38.13	22.38	82.61

Table 1: National % Pass Rate (2007 – 2014)
Source: Zimsec

In recent years, a bigger proportion of the unqualified teachers in Zimbabwe are holders of first degrees but lack professional teaching qualifications. Although the government is encouraging such teachers to attain professional teaching qualifications and often times threatening not to renew their contracts, there appears to be a perceived unwillingness to do so on the part of the affected teachers. Makuvaza and Gora (2014) noted a declining trend in recent years in the number of college and university graduates enrolling for the Bachelor of Education (B.Ed.) and Post-graduate Diploma in Education (PGDE) at the University of Zimbabwe which they attributed to a general unwillingness to invest in the profession.

1.1. Statement of the Problem

In the Zimbabwean school system there is a relatively large proportion of uncertified graduate teachers. Educationists believe that such teachers, despite having broad subject content, lack the necessary pedagogical skills to teach children. However, there is a perceived general unwillingness by uncertified graduate teachers to acquire professional teaching qualifications. The fact that some of the teachers have more than ten years teaching experience (Makuvaza & Gora, 2014) without bothering to attain proper teaching qualifications raises serious doubts about their commitment to the profession. It has been alleged that some of these teachers view teaching as merely a stepping stone to other more lucrative professions. It is against this background that the study sought to investigate determinants of willingness by uncertified graduate teachers to acquire professional teaching qualifications.

1.2. Research Questions

- i. To what extent are uncertified graduate teachers willing to attain professional teaching qualifications?
- ii. What are the organismic and socio-economic determinants of willingness to attain professional teaching qualifications?

1.3. Significance of the Study

Although studies have been conducted elsewhere (see Block, 2008; Bennell, 2004; Agezo, 2010) on why individuals choose the teaching profession, there has been little empirical work carried out in Zimbabwe to investigate the perceptions of teachers towards the profession and the factors that influence investment decisions on teacher training in general and particularly by practising uncertified graduate teachers to attain teaching qualifications. For example, the study by Chireshe and Shumba (2010) using a sample of 62 primary school teachers on a Bachelor of Education- in- service programme at a certain (not mentioned) University in Zimbabwe dwelled more on socio-economic factors but gave no attention to organismic factors. The current study investigated the influence of both organismic and socio-economic factors on decisions by uncertified graduates to take up teaching as a profession. While the study by Makuvaza and Gora (2014) interviewed those already training as teachers, this study differs in that it collected data from potential recruits to the teaching profession. Moreover, while most of the studies conducted in this area largely employed qualitative methods of analysis, this study employed econometric analysis.

2. Literature Review

In the literature, the following factors were found to influence human capital investment decisions:

2.1. Remuneration

Investments in education and training are made in anticipation of increased earning capacity. Generally pay differences are related to skills (Acemoglu & Autor, 2011) and a greater skill premium will encourage schooling investment. Dolton and Marcenaro-Gutierrez (2011) contend that the only condition that would attract qualified teachers to the profession is the awarding of attractive salaries to teachers. In a study that sought to investigate why Zimbabwean teachers seem demotivated in teaching as a profession, Chiresha and Shumba (2010), using a sample survey of 62 primary school teachers on the Bachelor of Education-in-Service Programme at a University in Zimbabwe found that poor salaries are among the most important factors that are responsible for the low morale and subsequent brain drain in the education sector. Therefore, the awarding of competitive salaries to teachers will greatly enhance the latter's commitment to the profession. The remuneration of teachers in Zimbabwe has remained poor due to the prolonged economic recession which left government without enough public resources to improve their salaries.

2.2. Cost of Training

Another important factor that influences investment in training is its cost. Like any other investment, investment in human capital entails an initial cost which one hopes to recoup in the future. According to Smith (2012), investment in additional schooling and training is attractive if the present value of future benefits exceeds costs. The costs that individuals incur when pursuing further studies or training include forgone earnings, tuition fees, cost of buying books stationery. Human capital investments are more likely when costs are lower.

2.3. Work Experience

Individual earnings partly depend on years of work experience. Earnings tend to rise with years of experience and because of this costs in terms of forgone earnings are higher for more experienced individuals if they were to leave work to pursue further studies. However, if training is done on-the-job these costs will be minimal. A typical empirical model for the relationship between wages and schooling proposed by Acemoglu and Autor (2011) is given by:

$$\ln W_j = \text{constant} + \gamma_s S_j + \gamma_e \text{ experience},$$

where j refers to individual j

W - wage earnings

S - level of schooling

γ_s and γ_e are regression coefficients on schooling and experience respectively. The model shows that wage earnings are a function of schooling and work experience.

In a study conducted in the United States, Block (2008) found that a good number of teachers leave the profession after their first year in the classroom due to stresses associated with the job. In a related study which took the form of a review of literature on teacher retention, Johnson, Berg and Donaldson (2005) concluded that least experienced teachers were most likely to leave teaching because they had lesser motivation for the teaching profession. The implication of these findings is that more experienced teachers are likely to endure the stress and continue teaching compared to less experienced teachers.

2.4. Age

An individual's current age is an important factor to consider when making human capital investment decisions. The length of an individual's work horizon is a function of the individual's current age. The work horizon is the difference between the current age and the retirement age of 65 years (in most cases). Smith (2012) observes that as workers become older, they acquire levels of experience and maturity that organisations are willing to reward with higher remuneration. Thus, on average, older and more experienced workers earn higher wages compared to younger and less experienced workers. Older workers are therefore discouraged from further investment in human capital because their forgone earnings are relatively high and the length of period (work horizon) over which they can enjoy benefits is comparatively short. Younger teachers are therefore expected to have a greater propensity than older teachers to invest in further training because they have a larger present value of total benefits since they have a longer remaining work life ahead of them.

2.5. Gender

There is tendency for women to identify with certain jobs as compared to men. This tendency for men and women to pursue different career paths is a result of constraints based on gender role socialisation (Barbulescu & Bidwell, 2012). People are more likely to identify with jobs that are consistent with other valuable identities that they hold. The nature of tasks involved in a job may shape gender perceptions, with jobs involving traditionally feminine tasks such as caring and cooperating being perceived as more feminine and jobs requiring physical strength and competition as more masculine (Cejka & Eagly, 1999 as cited in Barbulescu & Bidwell, 2012). In Zimbabwe it is not unusual to hear that teaching is a profession for women. Unfortunately, modern gender roles and cultural beliefs continue to emphasize care-giving to children as a more central responsibility of women than men, as a result women are more likely than men to value work that meshes well with child-rearing responsibilities, for example, nursing and teaching. Hanushek, et al. (1999) have established that generally females are more intrinsically motivated to stay in the teaching profession than men.

2.6. Altruistic Factors

Altruism refers to an inclination to serve society (Claeys, 2011). Using a non-probability convenience sampling method in a cross-sectional survey of newly qualified teachers in the US, Claeys noted that apart from socio-economic factors, altruistic factors such as the desire to work in educational settings, a love for and desire to work with children, and an inclination to serve society contributed immensely in shaping the participants' decision to become teachers. In a study involving 373 students in teacher education drawn from three Australian universities, Williams and Forgasz (2009) found that factors such as the desire to work with children and to contribute to society were important determinants of the students' decisions to become teachers. In a related study involving 211 student teachers, Catherine (2008) identified the following altruistic factors as being partly responsible for the participants' decision to enter the teaching profession: the desire to work with children, the 'calling' to teach, love of teaching, and the perceived easy nature of teaching work.

2.7. Occupational Status

Occupational status of teachers refers to the social standing and recognition accorded to teachers in society as professionals. Globally the teaching profession has been reduced to a marginal identity. Salifu and Agbenyega (2013) used a narrative literature review approach to explore motivation and identity issues affecting teachers' professional practice globally. They observed that in most parts of the world teachers are poorly motivated and have low identity. Makuva and Gora (2014), basing their argument on sentiments expressed by trainee teachers in surveys carried out at the University of Zimbabwe and Belvedere Teachers' college bemoaned the fact that teaching is now ranked lowly on the scale of professions in contemporary Zimbabwe. Most of the trainee teachers interviewed indicated that teaching was their last option apparently showing their lack of pride in the profession. These sentiments unfortunately portray teaching as a profession for 'failures', that is, for those who could not make it into more 'challenging professions'. The diminishing status of teachers has important implications on educational outcomes in that the low morale of teachers compromises service delivery and often results in poor performance by learners.

A numbers of factors are responsible for the low status of teachers and chief among them being the low remuneration of teachers which is not comparable to that of other professionals like doctors, bankers or engineers (Salifu & Agbenyega, 2013). The low status of teachers is also attributed to the relative easiness of entry to the profession and the fact that usually teachers constitute the largest group of professionals in any economy.

2.8. Working Conditions

Working conditions are also an important decision factor that influences decisions to enter the teaching profession. Career aspirants are attracted to a job where working conditions are good but are discouraged by poor working conditions. In the context of the teaching profession, Salifu and Agbenyega (2013) explain that working conditions refer to the physical and material environment that teachers are exposed to such as classroom space, class size, working hours, staff accommodation, electricity, classroom furniture, and the availability of teaching and learning materials.

In studies conducted in Ghana, Agezo (2010) and George and Mensah (2011) identified large class sizes and lack of sufficient teaching and learning materials as some of the factors that contribute to teacher job dissatisfaction. In a study on teacher job satisfaction in primary schools in Gweru District, Adebayo and Gombakomba (2013) identified the availability of teaching resources and infrastructure, flexible working hours, access to training and education as some of the factors that could lead to improved job satisfaction.

Working conditions for teachers in Zimbabwe are generally poor more so in rural areas. Chireshe and Shumba (2011) observes that teachers in rural areas often has to contend with poor staff accommodation, dilapidated infrastructure, poor transport links, higher workloads and political victimisation. In a comparative study on motivational levels of urban and rural teachers in Masvingo, Nyanga et al. (2012) noted that teachers in urban areas enjoy better working conditions than their rural counterparts. They noted that teachers in urban areas receive additional allowances from School Development Committees (SDCs), enjoy favourable promotional and growth opportunities because of their proximity to centres of power unlike rural teachers.

3. Methodology

A cross-sectional survey was conducted to collect data from uncertified graduate teachers drawn from public secondary schools in Harare Province, Zimbabwe. A random sample of 87 uncertified graduate teachers was selected using multistage cluster sampling. Education districts in Harare province were treated as clusters. Harare province has a total of 7 education districts and 82 secondary schools. A random sample of 5 education districts was selected, followed by a random sample of 30 schools within the selected districts. Every uncertified graduate teacher in the selected schools was considered for the study depending on their cooperation until a sample of 87 teachers was obtained. The use of multistage cluster sampling was justified because it is less time consuming in that travelling was restricted to selected schools within selected districts also making the data collection process less costly.

Permission to conduct the study in schools was sought from the Ministry of Primary and Secondary Education. Structured questionnaires were administered to relevant teachers at their work places with the help of school heads. The questionnaire consisted mostly of close-ended questions with pre-coded responses to allow for easy quantitative analysis. The questionnaires were designed to collect information on willingness to train as teachers, gender, age, working experiences, academic qualifications, and perceptions of the teachers on salary, working conditions, and status in society.

3.1. Description of Variables

The dependent variable was 'willingness' to acquire professional teaching qualifications while the independent variables were age, gender, experience, cost of training, type of academic degree qualification, and respondent's perceptions about the importance of remuneration, working conditions, altruistic factors, and occupational status of teachers in influencing their decisions to acquire professional teaching qualifications.

Table 1 below shows the variables that were included in the model and their descriptions.

Variable	Abbreviation	Description
DEPENDENT VARIABLE		
Willingness	<i>WIL</i>	Willingness to acquire teaching qualification Willing = 1, Not willing = 0
EXPLANATORY VARIABLES		
Age	<i>AGE</i>	Age of respondent in years
Gender	<i>GEN</i>	Sex of respondent: Male =1, Female = 0
Working experience	<i>WEXP</i>	Number of years working as a teacher
Degree type	<i>DEGT</i>	Type of academic degree: Science = 1, commercial = 2, arts = 3
Cost	<i>COST</i>	Cost of training = 1 if affordable and 0 if not affordable
Occupational status	<i>OS</i>	The variable measures (on a 3-point scale) the perception on the importance of status in influencing training decisions*.
Remuneration	<i>REM</i>	The variable measures (on a 3-point scale) the perception on the importance of remuneration in influencing training decisions*.
Working conditions	<i>WC</i>	The variable measures (on a 3-point scale) the perception on the importance of working conditions in influencing training decisions*.
Desire to work with children	<i>DES</i>	The variable measures (on a 3-point scale) the perception on the importance of altruistic factors in influencing training decisions*.

Table 1: Description of Variables

*The perception of respondents on the importance of remuneration, working conditions, altruistic factors and the status accorded teachers by society in shaping their decisions to train as professional teachers was measured on a 3-point scale with [1] = 'of no importance'; [2] = 'of some importance', and [3] = 'of great importance'.

3.2. Model Specification

A logistic regression model was estimated using E-Views 7 statistical package. The justification for using the logit model was the qualitative and dichotomous nature of the dependent variable. The estimated model took the following form:

$$L_i = \ln\left(\frac{P_i}{1 - P_i}\right) = \beta_1 + \beta_2 AGE + \beta_3 GEN + \beta_4 EXP + \beta_5 DEG + \beta_6 REM + \beta_7 WC + \beta_8 OS + \beta_9 DES + \beta_{10} COST + u_i$$

where $P_i = 1$ if respondent is willing to acquire teaching qualifications and $P_i = 0$ if respondent is not willing to acquire teaching qualifications.

4. Results and Discussion

Table 2 shows the descriptive statistics of variables measured on at least the ordinal scale. The ages of the respondents ranged from 23 years to 56 years and averaged 36 years with a standard deviation of 8.6 years while the average working experience was 8.2 years with a standard deviation of 6.8 years. These results show that the majority of uncertified graduate teachers still have a relatively longer work horizon.

Variable	Mean (Standard deviation)		
	Unwilling	Willing	Overall
Age	35.2 (10.2)	37.3 (4.8)	36.0 (8.6)
Working experience	7.7 (7.8)	9.1 (4.7)	8.2 (6.8)
Remuneration	2.4 (0.7)	1.9 (0.6)	2.2 (0.7)
Working conditions	2.5 (0.6)	2.1 (0.6)	2.3 (0.6)
Occupational status	2.1 (0.7)	1.8 (0.7)	2.0 (0.7)
Observations	53 (60.92%)	34 (39.08%)	87

Table 2: Descriptive Statistics of Variables

On average respondents perceive remuneration, working conditions and the occupational status of teachers as of some importance in influencing their decisions to acquire professional teaching qualifications. The majority of the teachers (60.92%) were unwilling to train as professional teachers.

Table 2 shows the results of the logistic regression.

Dependent Variable: WIL				
Method: ML - Binary Logit (Quadratic hill climbing)				
Date: 06/02/15 Time: 21:19				
Sample: 1 87				
Included observations: 87				
Convergence achieved after 6 iterations				
Covariance matrix computed using second derivatives				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.282495	5.141346	0.054946	0.9562
AGE	-0.191184	0.114700	-1.666822	0.0955
GEN	-2.663043	0.920850	-2.891941	0.0038
WEXP	0.192470	0.120231	1.600831	0.1094
DEGT	1.725548	0.534757	3.226791	0.0013
REM	-1.279761	0.638628	-2.003922	0.0451
WC	0.215747	0.738585	0.292108	0.7702
OS	0.390656	0.550523	0.709609	0.4779
COST	1.837680	0.761515	2.413189	0.0158
DES	1.361101	0.647243	2.102920	0.0355
McFadden R-squared	0.484695	Mean dependent var		0.390805
S.D. dependent var	0.490759	S.E. of regression		0.352590
Akaike info criterion	0.919474	Sum squared resid		9.572619
Schwarz criterion	1.202911	Log likelihood		-29.99710
Hannan-Quinn criter.	1.033605	Deviance		59.99421
Restr. deviance	116.4246	Restr. log likelihood		-58.21228
LR statistic	56.43035	Avg. log likelihood		-0.344794
Prob(LR statistic)	0.000000			
Obs with Dep=0	53	Total obs		87
Obs with Dep=1	34			

Table 2: Results of logistic regression

The maximum likelihood estimation results are statistically valid (LR Statistic = 56.43035: $p = 0.000000$). The McFadden R-Squared of 0.484695 is low but as Gujarati (2004) argues, with logistic regression one should not read too much into this value because R-Square values are generally lower making the conventionally computed R-Square of limited value in the dichotomous response models.

The logit regression results show that age is a statistically significant determinant ($p = 0.0955$) of willingness to acquire professional teaching qualifications by uncertified graduate teachers. The coefficient (-0.191184) shows that an increase in age of one year will decrease the odds ratio in favour of undergoing teacher training by 0.825980593 (about 17%). This result is obtained by taking the antilog of the coefficient. The results support the findings of Smith (2012) that young people are more likely to invest in human capital given they have a longer remaining work horizon which would translate into a larger present value of anticipated benefits.

The coefficient on gender (-2.663043) is statistically significant ($p = 0.0038$) showing that gender is an important determinant of willingness to acquire professional teaching qualifications. The negative sign on the coefficient shows that male uncertified graduate teachers are less likely to become professional teachers than their female counterparts. The results support findings by Hanushek, et al. (1999) who found that females are more intrinsically motivated to stay in the teaching profession than men. The results of this study on gender also help to buttress the findings by Barbulescu and Bidwell (2012) that women are more likely than men to value work that meshes well with child-rearing responsibilities.

The coefficient (0.192470) on work experience is not statistically significant ($p = 0.1094$). However, the positive sign on the coefficient suggests that more experienced uncertified graduate teachers are more likely to be more willing to acquire teaching qualifications than less experienced uncertified graduate teachers. The results lend credence to the findings by Johnson, Berg and Donaldson (2005) who concluded that least experienced teachers were most likely to leave teaching because they had lesser motivation for the teaching profession.

The coefficient (1.725548) on academic degree type is statistically significant ($p = 0.0013$). Since high values of the variable are associated with arts degrees, the implication of the positive sign on the coefficient is that art degree holders are more willing to acquire professional teaching qualifications than commercial and science degree holders.

Perceptions on working conditions seem not be a statistically significant factor ($p = 0.7702$) in influencing decisions of respondents to acquire professional teaching qualifications. This result is not surprising given the respondents are teaching in urban schools where working conditions are better compared to rural schools.

The coefficient (-1.279761) on remuneration is statistically significant ($p = 0.0451$) at 5% level of significance showing that remuneration is an important factor in influencing decisions by uncertified graduate teachers to acquire professional teaching qualifications. The coefficient shows that those uncertified graduate teachers who perceive remuneration to be 'of great importance' are 72% (one less the antilog of -1.279761) less likely to be willing to acquire professional teaching qualifications. The negative sign on the coefficient is as expected because the poor remuneration that teachers are currently receiving in Zimbabwe tend to impact negatively on their willingness to train as professional teachers. The results are consistent with the findings of Dolton and Marcenaro-Gutierrez (2011) who contend that the only condition that would attract qualified teachers to the profession is the awarding of attractive salaries. The results also support the findings of Chiresha and Shumba (2010) who found that Zimbabwean teachers are demotivated in teaching as a profession due to mainly poor salaries.

The study did not provide sufficient evidence ($p = 0.7750$) to conclude that perceptions on occupational status of teachers significantly impacts on decisions by uncertified graduate teachers to attain professional teaching qualifications.

The coefficient (1.361101) on the 'desire to work with children' is statistically significant ($p = 0.0355$) at the 5% level of significance showing that those uncertified graduate teachers who attach greater importance to the need to help children have high probability to undergo teacher training. The result shows the importance of altruistic factors in influencing decisions to enter the teaching profession. The result is consistent with the findings of studies by Catherine (2008), Williams & Forgasz (2009), and Claeys (2011) who found that the desire to work with children is a major contributing factor to enter the teaching profession.

The cost of training is also a statistically significant ($p = 0.0158$) factor in influencing decisions of uncertified graduate teachers to undergo teaching training. The positive sign on the coefficient (1.837680) suggests that those teachers who perceive the cost of training as affordable are more willing to acquire professional teaching qualifications than those who perceive the cost as unaffordable.

5. Conclusions

The study concluded that the majority of high school uncertified graduate teachers are unwilling to attain professional teaching qualifications. Male uncertified graduate teachers are more unwilling to train as professional teachers compared to their female counterparts. Moreover, science and commercial degree holders are less willing to train as professional teachers compared to arts degree holders. The study concluded that the most important factors that influence decisions of uncertified graduate teachers to attain professional teaching qualifications are age, gender, degree type, cost of training, remuneration, and the desire to work with children. Poor remuneration of teachers negatively affects the willingness of uncertified graduate teachers to become professional teachers. However, some people have a natural desire to work with children and this desire provides sufficient motivation for them to become teachers despite the poor remuneration, the diminished status of teachers and the difficult working conditions. It was also concluded that women identifies more with the teaching profession than men.

6. Recommendations

The study recommends that the government should make the teaching profession more attractive by improving the remuneration of teachers. The remuneration of teachers should be made competitive and comparable to those of other professions so that teachers do not always look elsewhere for greener pastures. Pay differences between certified and uncertified graduate teachers should be substantially different. The government should also make the cost of training affordable by offering financial assistance to those teachers who intend to train as professional teachers. The status of the profession can also be enhanced by restricting entry into the profession by employing formally trained teachers. The Ministry of Primary and Secondary Education should set up a Professional Educator's Council to oversee the accreditation and practice of teachers. The Ministry should only employ uncertified graduate teachers on a contractual basis and should assist financially those teachers who intend to undergo training as professional teachers.

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