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# Curriculum Orientation of Lecturers in Teacher Training College in Malaysia

Halimatussaadiah Salleh\* Abdul Rahim Hamdan Fauziah Yahya Hafsah Jantan Faculty of Education, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia \*E-mail of the corresponding author: halimah.ippm@gmail.com

#### Abstract

Curriculum development in teacher training college can be facilitated by indentifying the lecturers curriculum orientation. This study focuses on curriculum orientation of lecturer in Teacher Training Colleges (TTC) in Malaysia. Data were collected through questionnaire survey using the Curriculum Orientation Inventory, an instrument developed by Cheung and Wong (2002) which measures five orientations: academic, cognitive process, social reconstruction, humanistic, and technological. A total of 472 lecturers from 9 different TTC were involved in the questionnaire survey. Descriptive statistic and multivariate analysis of variance (MANOVA) were applied to analyze the findings. Results show that lecturers generally favor all five curriculum orientations with technological orientation ranked highest and cognitive ranked lowest. There is a significant difference in lecturers' cognitive orientation based on teaching experience in TTC. Lecturers teaching between 18 to 23 years are more inclined to cognitive orientation compared to those teaching between 12 to 17 years. Results obtained could enhance the understanding of TTC lecturers' curriculum orientation and help give an input to improve future teacher training curriculum program in TTC.

Keywords: Curriculum Orientation, lecturer, Teacher Training College.

#### 1. Introduction

Curriculum orientation is a personal belief about the purpose of education such as curriculum intent, content, organization, teaching methods, learning activities and instructional assessment of a curriculum (Cheung, 2000). Eisner and Vallance (1974) have proposed classification scheme consisting of five curriculum orientations: academic rationalism, cognitive processes, social reconstruction-relevance, self-actualization and curriculum as technology. Each orientation represents a distinct set of beliefs about curriculum design (Cheung & Wong, 2002). Academic rationalism conceptualizes curriculum as distinct subjects or disciplines (Erekson, 1992). Curriculum should aim at developing students' intellectual abilities in subject areas most worthy of study (Tanner & Tanner, 1995). Unlike the academic rationalism orientation, the cognitive process orientation stresses on the learning process rather than curriculum content. The purpose of curriculum is to develop student's ability to think. This curriculum orientation is intended to help students develop mental skills needed in any problem-solving situation associated with learning, using what has been learned or communication about things learned (Burns & Brook, 1970). Advocates of this orientation believe that high-level cognitive process skills are more relevant to students than subject matter.

Supporters of the self-actualization orientation believe that students should be the crucial source of all curricula. Rogers (1969) indicates that positive relationship enables people to grow. Therefore, the function of school curriculum is to provide each student with intrinsically rewarding experience that contributes to personal liberation and development (Cheung & Wong, 2002).

The social reconstructionist believes that the purpose of curriculum is to facilitate the reconstruction of a society (Schiro, 2008). The main purpose of school is to develop students' critical consciousness and sense of social responsibility. Technology orientation is based on the systematic curriculum planning and instructional efficiency (Cheung & Wong, 2002). The focus is on finding efficient means to a set of predetermined learning objectives.

Based on the importance of curriculum orientation among teachers as the curriculum implementer in schools, studies have been conducted by many reseseacher such as in Rateb Ashour et al. (2012), Mohsen Farmahini Farahania & Mehdi Maleki (2013), Dairabi Kamil et al (2013) and Tanrıverdi & Apak (2014) to measure teachers' curriculum orientations. Most of the studies carried out used primary school teachers as samples (Jenkins (2009), Horn (2012), Rateb Ashour et al. (2012) and Dairabi Kamil et al. (2013)). However, there have been no studies that focus specifically on the curriculum orientation among lecturers in TTC who are influential in molding high quality future teacher through teacher training. This is parallel with the lack of attention towards the quality of professional teacher educators (Smith, 2005).

Teaching and learning orientation of a teacher educator is related to the teaching and learning orientation of teacher trainee (Lunenberg and Korthagen, 2003). However, there are still insufficient studies on teacher educator characteristics (Lunenberg et al., 2007) despite their importance in ensuring enhancement of teacher quality. Therefore the main objective of this study is to identify the curriculum orientation profile of TTC lecturers in Malaysia as well as factors that influence their curriculum orientation.

#### 2. Research Purpose

The purpose of this study is to identify the curriculum orientation of lecturers in TTC in Malaysia and to differentiate the curriculum orientation based on the lecturers' backgrounds which are gender, subject specialty and teaching experience in TTC. This study is carried out to answer the following research questions:

- i. What are the curriculum orientations of TTC lecturers?
- ii. Are the curriculum orientations related to lecturer's gender, subject specialty and teaching experience in TTC?

### 3. Methodology

This study is a descriptive study employing a self-administered questionnaire survey. The respondents were selected based on cluster sampling method. There are 27 TTCs in Malaysia with a total of 3,817 lecturers. The TTCs can be divided geographically into six clusters, four in Peninsula Malaysia - Northern (4 TTCs), Southern (4 TTCs), Central (5 TTCs), Eastern (4 TTCs) , Sabah (3 TTCs) and Serawak (5 TTCs). The questionnaires were delivered personally by the researcher to each selected TTCs. Due to time and budget constraints, the Southern and Central clusters were selected. As a result, nine TTCs were visited by the researcher and questionnaires were sent to all lecturers in the selected TTCs. Out of the 1,493 questionnaires sent to lecturers in the nine TTC, 472 (a response rate of 31.6%) were completed and analyzed. Based on Krejcie & Morgan (1970), this value is sufficient in representing the total of 3,817 lecturers of the 27 TTC in Malaysia. Furthermore, lecturers in all 27 TTCs have similar characteristic since they were appointed by the Malaysian Ministry of Education based on the same criteria.

The instrument used in this study is a questionnaire translated and modified based on Cheung and Wong's (2002) Curriculum Orientation Inventory (COI) which measures the five orientations: academic, cognitive process, social reconstruction, humanistic, and technological. There were 30 items and all items were translated to Malay language using backward translation and validated by curriculum specialists. The respondents were asked to reflect on their teaching styles on a 7-point Likert scale, ranging from 1 being strongly disagree to 7 being strongly agree. There are 8 items representing each constructs which are cognitive, technological, humanistic, academic and social orientation. The overall alpha Cronbach coefficient was 0.918 which consisted of cognitive orientation (0.915), technological orientation (0.915), humanistic orientation (0.915), academic orientation (0.915), and social orientation (0.913) giving support for the reliability of the data. Data from this study were analyzed using the statistical software SPSS version 16. Descriptive statistic is presented in the form of frequencies and means to identify the lecturer's curriculum orientation. Statistical inference is used to analyze the difference in curriculum orientation based on the lecturers' backgrounds which are gender, teaching experience and subject specialty in TTC

#### 4. Results

Details of the demographic information are given in Table 1 below. The gender distribution is almost equal where out of the 472 samples, 238 (50.4%) are male lecturers and 234 (49.6%) are female lecturers. Majority of the respondents (68%) have been teaching for up to 11 years. The remaining (32%) have been teaching for more than 11 years. Only 30 of the respondents (6%) have had more than 23 years of teaching experience. Based on the subject specialty, 114 (24%) are lecturers for Educational studies, 74 (16%) lecturers are teaching Social Studies, 124 (26%) lecturers are from Language Studies, 91 (19%) lecturers teach. Science and Mathematics, while 66 (14%) lecturers are lecturer in Physical education.

	Gender		Teaching Experience in TTC (Years)					
Teaching Specialty	Male	Female	0 - 5	6 - 11	12 - 17	18 - 23	> 23	
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	
Educational Studies	53(11.2)	64(13.5)	47(9.9)	36 (7.6)	14 (2.9)	8(1.7)	12(2.5)	
Social Studies	40(8.4)	34(7.2)	39 (8.3)	12 (2.5)	9 (1.9)	10(2.1)	4(0.8)	
Language Studies	53(11.2)	71(15)	41 (8.6)	51(10.8)	10 (2.1)	12(2.5)	10(2.1)	
Science and Maths	48(10.1)	43(9.1)	20 (4.2)	31 (6.6)	25 (5.3)	13 (2.8)	2(0.4)	
Physical Education	44(9.3)	22(4.6)	29 (6.1)	15 (3.2)	13 (2.8)	7(1.5)	2(0.4)	
Total	238(50.4)	234(49.5)	176(37.2)	145(30.7)	71(15.0)	50(10.6)	30(6.4)	

 Table 1: Distribution of sample based on demographic variables

The mean score for each curriculum orientation have been summarized and shown in Table 2.

The means varied between 5.87 and 6.01 out of a maximum of 7, indicating that lecturers generally valued and favored all five curriculum orientations. When the Orientations ranked by mean scores, it is found that technological orientation has the highest mean score while cognitive orientation has the lowest mean. The results obtained are similar to Cheung and Wong (2002), Foil (2008), Rateb Ashour et al., (2013) showing that

the samples in this study favors all curriculum orientation as in Table 2.

able 2. Mean score for curriculum orientation (1)	• <i>••</i>
Orientation	Mean
Technology	6.01
Social	5.97
Humanistic	5.93
Academic	5.87
Cognitive	5.85

#### Table 2: Mean score for curriculum orientation (N= 472)

ANOVAs were conducted with results showing significant mean differences among the five orientations. The standard univariate ANOVA indicates a significant difference among the five curriculum dimension [F (4,1884) = 19.4, p< .001]. The alternative univariate test (i.e. Greenhouse-Geisser and Huynh-Feldt) yield the same F value and the p values indicating that all three tests are significant at the .05 level (See table 3)

|--|

		Type III Sum of				
	Source	Squares	df	Mean Square	F	Sig.
factor1	Sphericity Assumed	8.889	4	2.222	19.427	.000
	Greenhouse- Geisser	8.889	3.893	2.283	19.427	.000
Error(factor1)	Sphericity Assumed	215.511	1884	.114		
	Greenhouse- Geisser	215.511	1.834E3	.118		

Pair-wise comparisons were done following multivariate test that indicate a significant difference among the five curriculum orientation with Wilks' Lambda = (4, 468) = 19.398, p < .001. Using pair-wise comparisons, 7 of the 10 comparisons are significant after controlling for family-wise error across the 10 tests at the .05 level using the Bonferroni procedures. There were no significant difference found between the mean for cognitive and academic orientation, the mean for technological and social orientation and also the mean for humanistic and social orientation (p> .05) (see table 4). This implies that the mean for the technological orientation was significantly higher than the means for humanistic, academic and cognitive orientation. It shows that lecturers of TTC are most inclined to believe that learning objectives should determine the selection of content, organization, pedagogy and assessment methods for a curriculum, and that learning should occur in certain systematic and efficient ways.

Curriculum orientation	Cognitive	Technological	Humanistic	Academic	Social
Cognitive	-	*	*		*
Technological	*	-	*	*	
Humanistic	*	*	-	*	
Academic		*	*	-	*
Social	*			*	-
+0: :0					

#### Table 5: Difference between mean of the 5 curriculum orientation

\*Significant at p<.05 level

The mean score for each curriculum orientation was analyzed based on gender, subject specialty and teaching experience in TTC. As shown in Table 6, it is found that mean scores for curriculum orientation for male lecturers are almost similar to female lecturers except for technological orientation. Female lecturers scored higher on technological orientation (mean = 6.05).

Based on teaching experience, the mean scores for cognitive (mean = 6.03) and technological (mean = 6.24) is higher for lecturers teaching between 18 to 23 years. Mean score for humanistic, academic, and social orientation is higher for lecturers teaching for more than 23 years. For subject specialty, lecturers teaching educational studies show a higher mean score compared to others in cognitive, humanistic, and social orientation. Physical education lecturers show a higher mean score for technological and academic curriculum orientation.

Table	6:	Curriculum	Orientation	Mean	scores	Distribution	Based	on	Gender,	subject	specialty	and
teachi	ng e	experience in	TTC							-	-	

Curriculum Gender			Teaching Experience				Subject Specialty					
Orientation	L	F	TI	T2	Т3	T4	T5	B1	B2	B3	B4	B5
Cognitive	5.85	5.86	5.88	5.82	5.67	6.03	6.00	5.93	5.72	5.91	5.76	5.88
Technological	5.98	6.05	6.01	5.95	5.93	6.24	6.16	6.05	5.95	6.05	5.95	6.06
Humanistic	5.94	5.93	5.92	5.92	5.82	6.10	6.13	6.06	5.85	5.95	5.82	5.94
Academic	5.86	5.87	5.90	5.87	5.72	5.90	5.97	5.90	5.84	5.90	5.76	5.93
Social	5.97	5.98	6.01	5.95	5.80	6.08	6.11	6.06	5.88	5.97	5.95	5.97

T1= 0-5 years, T2= 6-11 years, T3=12-17 years, T4=18- 23 years, T5= More than 23 years

 B1=Educational Studies, B2= Social Studies, B3= Language Studies, B4=Science, B5= Physical Education Analysis using MANOVA test was carried out to test whether the differences in mean score based on gender, teaching experience and subject speciality in TTC shown in Table 6 are significant. As shown in Table 7, there was no significant effect for gender and subject speciality on curriculum orientations (p> .05) but significant difference is found for teaching experience [F (5,1391) =1.853, p<.05, Wilks' Lambda= .916; η<sup>2</sup> = .022].

Table 7: Relationship between curriculum orientation with gender, teaching experiene and subject specialty in TTC

Effect	Wilks' Lambda	F	Hypothesis df	Error df	Sig.	Eta squared
Gender	.989	.973 <sup>a</sup>	5	419	.434	.011
Teaching experience in TTC	.916	1.853	20	1391	.012	.022
Subject specialty	.968	.691	20	1391	.838	.008

Due to the significant effect based on MANOVA, the next step is to analyze among groups as in Table 8. The result indicates that statistically significant differences are found for the curriculum orientations of cognitive, technological, and humanistic (p < 0.05).

#### Table 8: Test of between-subject effects

Source		dependent	Type III Sum of	df	Mean	F	Sig.	eta
		variable	Squares		Square			squared
Teaching	experience	Cognitive	5.363	4	1.341	3.493	.008	.032
in TTC		Technological	5.541	4	1.385	3.518	.008	.032
		Humanistic	4.902	4	1.226	2.949	.020	.027
		Academic	2.182	4	.545	1.213	.304	.011
		Social	3.461	4	.865	1.997	.094	.019

Post Hoc Bonfferroni test was subsequently conducted to compare among each group of teaching experience. Result showed that the significant difference (p < 0.05) is found in cognitive orientation among lecturers with teaching experience between 12 to 17 years and among lecturers with teaching experience between 18 to 23 years (Table 9).

(i) tapphing experience	(i) togething experience		Sta		95% Confidence Interval		
(I) teaching experience	(j) teaching experience	Mean	Stu. Error	Sig	Lower	Upper	
(years)	(years)		LIIU		Bound	Bound	
18-23	0-5	.1479	.09929	1.000	1323	.4281	
	6-11	.2115	.10161	.380	0752	.4982	
	12-17	.3573*	.11438	.019	.0345	.6800	
	> 23	.0333	.14308	1.000	3704	.4371	

Comparison between cognitive orientation mean score in Table 10 shows that lecturers teaching between 18 to 23 years have a higher mean score compared to the mean score for those teaching between 12 to 17 years.

Dependent variable	Teaching experience in	Mean	Std. Error	95% Confidence	e Interval
(curriculum orientation)	TTC (years)				Upper
				Lower Bound	Bound
Cognitive	0-5	5.886	.051	5.785	5.987
	6-11	5.758	.063	5.633	5.882
	12-17	5.653	.081	5.493	5.813
	18-23	6.047	.092	5.866	6.229
	> 23 years	5.990 <sup>a</sup>	.142	5.711	6.269

#### Table 10: Comparison of means for cognitive orientation based on teaching experience in TTC

#### 5. Discussion & Conclusion

It appears from the findings of this study that TTC lecturers have a favorable view towards all five curriculum orientations as in other recent studies (Rateb Ashour (2012), Mahlios, et al., (2008), Cheung & Wong (2002) and Foil (2008)). Based on these studies, it is reasonable to conclude that most educators would find some value in the theoretically opposed orientations as stated by Miller (1983) that most teachers are not bounded to only one orientation. The result of this study is also in line with the education system in Malaysia that is based on the National Philosophy of Education which is an eclectic philosophy that stresses on producing holistic individuals in physical, emotional, social, and spiritual aspects who are also a noble and productive citizen. This conclusion also added strength to the suggestion by Foil (2008) that Schwab's idea of the eclectic and practical approach curriculum (Schwab, 1970) should be revisited.

This study also indicate that TTC lecturers as in other previous studies done in United States, Hong Kong and Jordan do have some regard for each orientation and are not truly eclectic in their curricular views (Foil, 2008). Although lecturers are favorable to all of the orientation, there are significant differences among the five curriculum orientations and some orientations are preferred more than others. The significant differences between orientation identifies distinct learning goals, learning models, roles of instruction, nature of content, organization of the learning environment, and model of instruction (Jenkin, 2009).

Significant differences among mean scores indicate the technological orientation is hold in highest regard by TTC lectures in Malaysia while the cognitive orientation appeals least to lecturers. This is different from studies conducted in Hong Kong and United States where the cognitive orientations was well regarded.

While the Chinese and American educators agree on the method of teaching cognitive skills (Foil, 2008), Malaysian teacher educators have a low regard to the notion that learning processes, high-level thinking skills, the transference of learning to diverse situations, and problem solving skills are among the top priorities for educating student.

The above finding is in contrast to the expectation of the Malaysian Ministry of Education transformational agenda through the Malaysia Education Blueprint 2013-2025 which stresses on enhancing the thinking skills of Malaysian students. Based on Trend in International Mathematics and Science Study (TIMSS) analysis in 2007, Malaysia was ranked 20 out of 49 countries that participated. The student's achievement that were below TIMMS average score implies that they still lack competency in answering problem solving questions that needs high level thinking skills.

The results of this study also show that teaching experience is related to the curriculum choices made by lecturer. Based on the mean scores of cognitive orientation derived from this study, it appears that lecturer with 18 to 23 years of teaching experience are more cognitive in their view of curriculum compared to those with only 12 to 17 years of teaching experience in TTC. It showed experience has a significant effect on lecturers from more on teacher centered curriculum towards cognitive orientation student centered approach which is similar to result in Jenkins (2009). However, this result differs from Cheung and Wong (2002). Cheung and Wong found teachers with greater than 20 years of teaching experience to be more aligned with the curriculum orientation of academic rationalism which is more teachers centered.

#### 6. Recommendations

Finding from this study confirmed results in the previous studies that indicate clear differences in the beliefs of lecturers and teachers in different countries. It is important to replicate this study using a broad cross section of Malaysian teachers and lecturers to determine the extent to which this finding is true.

This study also shows that the least favored curriculum orientations held by lecturers are cognitive orientation that could be less compatible with the current educational policy which focus on the cognitive process of the educational products. Therefore, systemic efforts, should be made to reach into lecturers curriculum orientations to make them accomodating to curriculum transformation.

This study also indicates that experienced lecturers tend to hold to the curriculum orientations of cognitive process. It is important to explore the nature of this transition as it is very significant in the curriculum

transformation in Malaysia which focuses on the production of a holistic child who has a high level of thinking still. Practically, Malaysian Ministry of Education needs to consider teaching experience in TTC to be the basis of consideration in professional development courses for TTC lecturers because this is the factor that might have an impact towards the opinion and orientation of lecturers for a certain curriculum implementation.

Other key findings of this study identify opportunities for futher research. Specifically, it would be of value to discover the relationship between curriculum orientation and other parts of schooling terms such as teaching and learning, etc.

As the teaching and learning orientation of a teacher educator is related to the teaching and learning orientation of teacher trainee therefore it is important to fully understand how lecturers of TTC responds to the educational policy, make decisions regarding classroom practices and internalize the curriculum orientations.

#### References

Belgin Tanrıverdi and Özlem Apak (2014). Pre-service Teachers' Beliefs about Curriculum Orientations. Procedia - Social and Behavioral Sciences. 116 (2014) 842 – 848

Burn R.W. & Brooks. G.D. (1970). Curriculum Design in a Changing Society Richard Educational Technology Publications. Englewood Cliffs, New Jersey

Cheung, D. (2000). Analyzing the Hong Kong junior secondary science syllabus using the concept of curriculum orientations. Educational Research Journal, 15(1), 69-94.

Cheung, D., and Wong H.N. (2002). Measuring teacher beliefs about alternative curriculum design. The curriculum journal 13: 225-48.

Dairabi Kamil, Ahmad Jamin & Muhammad Yusuf (2013). Curriculum Orientation and Teaching Conception among Islamic Elementary Public School Teachersin Indonesia: A Rasch Analysis Approach. Asia Pacific Collaborative education Journal . Vol. 9, No. 1, 2013, pp. 160-174

Eisner, E.W., and E. Vallance (1974). Conflicting conceptions of curriculum. Berkeley, CA: McCuthchan.

Foil, J., (2008). Determining the curriculum orientations of public school administrators using the modified curriculum orientation inventory. University of Kansas, 2008

Erekson, T. (1992). Technology Education from the Academic Rationalist Theoretical Perspective. Journal of Technology Education . Vol 3 (2)

Horn, N. (2012). Comparing K-12 Teachers in Virtual and Brick-and-Mortar Settings Using Curriculum Orientations. In P. Resta (Ed.), Proceedings of Society for Information Technology & Teacher Education International Conference 2012 (pp. 1838-1841). Chesapeake, VA: AACE.

Jenkins, S.B., (2009), Measuring teacher beliefs about curriculum orientations using the modified-curriculum orientations inventory. Curriculum Journal, 20:2, 103-120.

Korthagen, F, A.J., Loughrn, J., \$ Lunenberg, M. (2005). Teaching teachers: studies into the expertise of teacher educators. Teaching and teacher education, 21(2), 107-115.

Krejcie, R.V., & Morgan, D.W., (1970). Determining Sample Size for Research Activities. Educational and Psychological Measurement.

Lunenberg, M.L. & Korthagen, F. (2003). Teacher educators and student-directed learning. Teaching and Teacher Education, 19(1), 29-44.

Lunenberg, M, Korthagen, F, Swennen, A, (2007) The teacher educator as a role model. Teaching and teacher education 23: 586-601.

Mahlios, M., Friedman-Nimz, R., Rice, S., Peyton, V., & OBrien, B. (2010). Measuring Teachers Curricular Beliefs: From Hong Kong to the United States.Curriculum and teaching, 25(2), 81-100.

Miller, J. P. (1983). The education spectrum: Orientations to curriculum. New York: Longman.

Mohsen Farmahini Farahania & Mehdi Maleki (2013). A survey on Tendency toward Curriculum Ideologies among Academic Board Members in Educational Sciences FacultiesTehran 2010-11. Procedia - Social and Behavioral Sciences Volume 116, 21 February 2014, Pages 2392–2396

Rateb Ashour, Samer Khasawner, Jamal Abu-Alruz & Subhi Alsharqawi (2012). Curriculum orientations of preservice teachers in Jordan: a required reform initiative for professional development. Teacher development: An international journal of teachers' professional development, 16:3, 345-360

Reding C.A. (2008). Curricular Orientations of Catholic School Teachers and Administrators. Unpublished Thesis University of Kansas

Rogers, C.R. (1969). Freedom to Learn. Columbus, OH: Merrill.

Schwab, J. (1970). The practical: a language for curriculum. Washington, D.C.: National Education association. Schiro, M. (2008). Curriculum theory: conflicting visions and enduring concerns. Los Angeles: Sage Publications.

Smith, K. (2005). Teacher educators' expertise: what do novice teachers and teacher educators say? Teacher and teacher education 21 (2005) 177-192.

Tanner, D, & Tanner, L. (1995). Curriculum development: Theory into practice (3<sup>rd</sup> Ed.). New York: Merrill.

Halimatussaadiah Salleh is currently a PhD candidate of Curriculum and Instruction in University of Techology Malaysia. Her research is mainly focusing on teaching style and curriculum orientation of lecturer in Teacher Training College in Malaysia. She attained her first degree in B.Sc (Hons) from University of Guelph, Canada; M.Ed (Curriculum development) from University of Malaya. She is a senior lecturer in Institut Pendidikan Guru Kampus Perempuan Melayu Melaka since 2007.

Abdul Rahim Hamdan is an Associate Professor and Head of Department of Education foundation & social science in the Faculty of eduation, Technology University of Malaysia. He attained his first degree in B.A.Ed (Geography) with honor from University Science of Malaysia; M.Ed (Curriculum and Instruction) from Technology University of Malaysia and Phd in Professional and continuing education from University of Surrey, England. His research and publication are related to his interest in teaching, curriculum & instruction and continuing education.

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