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A Study of Self and Professional Development, Teacher Self-Efficacy, Resilience Quotient, and Professional Ethics Attributes Among Rural Teachers in the *Kru Rak Thin* Project, Thailand

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Abstract

The Equitable Education Fund aims to assess critical attributes of beginning teachers from the *Kru Rak(ksa) Thin Project* in rural Thailand to inform future cohorts. Research assessed the levels of self and professional development, teacher self-efficacy, resilience quotient (RQ), and professional ethics among beginning teachers; and compared these attributes based on gender, graduation major, educational institution, and schools context; and gathered stakeholder opinions of beginning teachers. The sample consisted of 317 volunteers from the first cohort of the Kru Rak Thin project, 70 school principals, and 77 mentor teachers. This study assessed four key attributes of Kru Rak Thin teachers—self and professional development, teacher self-efficacy, RQ, and professional ethics. Parallel questionnaires were given to mentor teachers and school principals to evaluate their perceptions in the same domains. Data analysis was performed using descriptive statistics, the Mann-Whitney U Test, and the Kruskal-Wallis Test. The results indicated that self and professional development, teacher self-efficacy, RQ, and professional ethics attributes among beginning teachers were overall high, with professional ethics scoring highest, followed by teacher efficacy, RQ, and self and professional development. Teachers stationed on islands exhibited a significantly higher RQ than those in highland areas. Stakeholder opinions regarding the four core attributes of beginning teachers were also elevated. It is essential to enhance the capacity of Kru Rak Thin teachers through both comprehensive and targeted measures, particularly for those in highland areas who face lower readiness.

Keywords: *self and professional development, teacher self-efficacy, resilience quotient, professional ethics attributes, beginning teachers.*

Introduction

To address inequalities in educational access in remote areas of Thailand, the Equitable Education Fund (2025) initiated the Kru Rak Thin project to recruit and develop a new generation of teachers from local communities. These teachers are expected to return and enhance

educational quality and equity in their home communities. In 2024, the inaugural cohort of 327 scholarship holders from 11 universities completed their studies and were appointed as assistant teachers in 285 schools across 44 provinces under the Office of the Basic Education Commission (Equitable Education Fund, 2024).

This initiative corresponds with the concept of an induction period which has demonstrated efficacy in similar teacher development programs, such as the *Kru Khruwattanawithi* project under royal patronage. Research on the Kru Khruwattanawithi teacher cohort identified three fundamental domains of professional needs: characteristics of effective educators (6 indicators); collaborative skills within social and educational contexts (6 indicators), and professional competencies (12 indicators), with a total of 24 indicators (Erawan, 2019).

The fundamental modules intended to meet these developmental requirements include personal growth, goal setting, financial literacy, digital proficiency, and professional collaboration. The efficacy of these modules has been assessed regarding teacher self-perception, career advancement, and Resilience Quotient (RQ). Teacher self-efficacy is a construct that pertains to a teacher's conviction in their capacity to positively impact student learning. Elevated teacher efficacy is associated with increased instructional confidence, improved student outcomes, and enhanced motivation (Tschannen-Moran, et al., 1998; Bakar, et al., 2012).

Beginning teachers in Kru Rak Thin often face arduous working conditions due to geographic isolation, restricted access to educational resources, and the need to navigate cultural and linguistic diversity within rural communities. These challenges demand high levels of resilience, characterised as the ability to adjust to and recover from difficulties, crucial for maintaining psychological health and long-term professional effectiveness (Department of Mental Health, 2020; Khoshouei, 2009; Masten, 2001). The program also prioritises the development of ethical and moral integrity in accordance with the professional code of conduct for educators.

Research Objectives

The objectives of the study presented in this article were to:

- examine levels of self and professional development, teacher self-efficacy, Resilience Quotient (RQ), professional ethics attributes among the beginning teachers.
- compare levels of self and professional development, teacher self-efficacy, RQ, professional ethics attributes among beginning teachers, categorised by gender, academic major, type of teacher education institution, and the characteristics of the schools where they are teaching.
- gather stakeholders' opinions (mentor teachers and school principals) about beginning teachers.

Kru Rak Thin aims to improve the quality of educators in underprivileged Thai schools. The initiative offers scholarships to marginalised individuals with teaching potential, allowing them to obtain a bachelor's degree in education and serve their communities as educators. The program has assisted 867 graduates, who are employed in 697 schools throughout 53 provinces countrywide (Equitable Education Fund, 2025).

Research Hypothesis

We hypothesise that there are significant differences in the levels of self and professional development, teacher self-efficacy, RQ, professional ethics attributes among the beginning teachers, when classified by gender, academic major, type of teacher education institution, and school context and these differences are associated with the project.

Literature Review

The study investigated four essential characteristics of teachers, including self and professional development, teacher self-efficacy, RQ, and professional ethics, discussed below.

Self and Professional Development

Self and professional development involve a systematic process of enhancing personal and professional skills, particularly in educational professions. This ongoing improvement allows for effective task execution, adaptability, and positive outcomes for learners. It is a vital competency for tasks such as classroom management, educational technology integration, and fostering active learning or artificial intelligence in education (Darling-Hammond et al., 2017). The OECD emphasises the need for educators to engage in lifelong learning to adapt to changing societal and technological contexts. Commitment to continuous professional development, through both structured and unstructured learning, reflects the ability to collaborate and gain insights from professional networks, including peer interactions and Professional Learning Community participation (Vangrieken, et al., 2017). The Teaching and Learning International Survey (TALIS) identifies five fundamental pillars of the teaching profession: 1) Knowledge and Skills; 2) Professional Status; 3) Peer Control; 4) Responsibility and Autonomy; and 5) Prestige and Societal Value. This study assesses teachers' capacity for ongoing improvement in knowledge, teaching effectiveness, interpersonal skills, and professional competencies. The assessment comprises 24 items on a six-point scale, categorised into three components: Effective Teacher Characteristics (6 indicators); Social and School Functioning Skills (6 indicators); and Professional Competencies (12 indicators). (OECD, 2019).

Nevertheless, previous studies have demonstrated that gender has a significant impact on these variables. Tsymbaliuk et al. (2020) found that, despite similar professional confidence, female Ukrainian faculty members experienced lower job satisfaction and perceived fairness, highlighting gender discrepancies. Yüner (2022) utilized Turkey's TALIS 2018 data to show that gender, seniority, and school level influenced teachers' professional development needs. Concerning professional development, female teachers reported higher needs for student behaviours and classroom management, while male teachers noted significantly higher needs for pedagogical competencies in teaching the subject field and knowledge of the curriculum. The results indicate that all teachers have a higher-level need for teaching in multicultural and multilingual settings. However, new teachers have indicated significantly higher needs than veteran teachers.

Teacher Self-efficacy

Self-efficacy refers to one's belief in the ability to produce the desired outcome. Bandura (1977) described self-efficacy as consisting of two dimensions — efficacy expectation and outcome expectancy. An efficacy expectation definition includes "*the conviction that one can successfully execute the behaviour required to produce outcomes*," and outcome expectancy is defined as "*a person's estimate that a given behaviour will lead to certain outcomes*" (p. 193). This interpretation is consistent with Pajares (1997) employing general measurement tools that obscure the self-efficacy concept. These instruments detach self-efficacy from situational and contextual factors, representing it merely as a generalised personality trait. Although Bandura (1997) clearly defined the concept of self-efficacy in theoretical terms, subsequent research, such as that of Tschannen-Moran and Hoy (2001), has indicated that applying this concept in the context of teaching requires consideration of additional factors, such as administrative expectations and evaluation systems, that may distort teachers' perceptions of their capabilities, creating the idea of teacher self-efficacy, which means teachers' confidence in their ability to take actions that help students get involved and learn better. Their work has led to the development of the widely used

Teachers' Sense of Efficacy Scale, which captures teachers' self-perceptions across three key domains: student engagement, instructional strategies, and classroom management.

Teacher self-efficacy is important for teachers as it influences teachers' persistence when faced with difficult situations; the domains of teacher education and educational effectiveness are attributing heightened significance to the role of teachers' self-confidence (Klassen et al., 2011; Klassen and Tze, 2014; Tschannen-Moran and Hoy, 2001) and higher teacher self-efficacy is associated with improved teaching quality (Na & Isa, 2024). Numerous factors may elucidate this augmented focus. Primarily, teacher self-efficacy demonstrates a robust correlation with educators' pedagogical methodologies and the calibre of instructional practices employed by teachers (Holzberger et al., 2013). Second, these teaching practices correlate, in turn, with student achievement motivation and student learning outcomes, which are essential educational outcomes (Caprara et al., 2006; Paisun et al., 2024). Third, teachers with high self-efficacy show higher job satisfaction and commitment and are less likely to be affected by burnout, indicating the importance of the construct for their well-being (Avanzi et al., 2013; Chesnut and Burley, 2015; Mostafa and Pál, 2018). Fourth, teachers with higher self-efficacy also had a more positive attitude towards inclusive education of students with special educational needs (Saloviita & Almulla, 2024). Therefore, TALIS also collects more subjective measures of teachers' perception of the quality of their own teaching, in addition to the factual indicators of teachers' classroom practice presented above (i.e., frequency of use of certain practices and time spent on various activities).

Teacher self-efficacy is essential for structuring effective learning experiences for students and may surpass other teacher attributes in significance (Bakar et al., 2012). Teacher self-efficacy refers to the degree of confidence a teacher possesses regarding their capability to proficiently design and implement instructional methodologies. This concept embodies a teacher's assurance in executing efficient and effective pedagogical practices, frequently associated with a constructive professional disposition (Larrivee & Cook, 1979; & Podell Soodak, 1994, as cited in Martinez, 2003). Educators possessing a strong sense of teaching self-efficacy are more inclined to trust in their capacity to motivate students and are more likely to pursue ongoing self-improvement compared to those with diminished perceived efficacy (Soodak et al., 1998, cited in Martinez, 2003).

Resilience Quotient (RQ)

Resilience, derived from the Latin words *salire* (to leap up) and *resilire* (to spring back), signifies the capacity to recover from adverse situations (Davidson et al., 2005, cited in Khoshouei, 2009). Resilience, once regarded as a fixed trait of individuals, is now recognized as a dynamic process that entails positive adaptation to stressors, changes, or threats (Grotberg, 1995, cited in Erawan (2010). Grotberg articulates the construct of resilience through three fundamental components: 1) I have—possess external supports: trusting relationships, structure and rules, role models, autonomy support, and access to services. 2) I Am — Intrinsic characteristics: loveable and loving, empathy and altruism, self-pride, autonomy and responsibility, hope, faith, and trust. 3) I Can — Social competencies encompassing communication, problem-solving, impulse control, emotional insight, and seeking support.

This research used the Erawan's (2010) instrument which divides RQ into five components and 22 indicators. (See Appendix 2 for details).

Professional ethics refers to the codified standards of behaviour that function as guiding principles for educators. These regulations are designed to preserve and enhance the dignity, integrity, and respect associated with the profession in a sustainable manner within the societal context (Royal Thai Government Gazette, 2013). The Regulation of the Teachers' Council of Thailand regarding the Code of Ethics for the Teaching Profession B.E. 2556 (2013) categorizes

professional ethics into five distinct divisions, which encompass nine ethical principles, as delineated in Table 1.

Table 1: ***Five Divisions and Nine Principles of Professional Ethics as Defined in the National Teacher Code of Conduct***

Domain	Summary Description
1. Toward Oneself	Exercising self-regulation and engaging in ongoing professional development concerning knowledge, character, and vision.
2. Toward the Profession	Exhibiting affection, trust, integrity, and accountability towards the educational profession, while also being an exemplary member of the professional community.
3. Toward Learners and Service Recipients	Demonstrating care, empathy, encouragement, and equity towards students without the pursuit of personal benefit.
4. Toward Colleagues	Facilitating reciprocal support and promoting cohesiveness among colleagues founded on ethical standards.
5. Toward Society	Taking a leadership role in preserving and promoting society, environment, culture, and a democratic system with the King as Head of State.

According to Table 1, Erawan (2020) further refined the five divisions of professional ethics into nine key indicators, 1) Demonstrating compassion through care and equitable support for students. 2) Teaching with integrity to enhance students' knowledge and moral character. 3) Serving as a role model through proper conduct. 4) Avoiding actions that impede students' holistic development. 5) Abstaining from personal gain or misuse of authority regarding students. 6) Committing to ongoing professional and personal development. 7) Exhibiting dedication to the teaching profession and active involvement in professional bodies. 8) Collaborating with colleagues and community with a strong ethical commitment. 9) Leading efforts to preserve cultural heritage and uphold democratic values within the constitutional monarchy. Recent studies have explored the demographic and experiential determinants of ethical perceptions in education. Debeş (2021) found that age and experience notably influenced ethical perceptions among 70 educators in Northern Cyprus, while gender was deemed non-significant. This finding contrasts with Burakgazi, et al., (2020), who identified gender and academic major as significant factors affecting ethical views, with female pre-service teachers demonstrated higher levels of ethical awareness than their male counterparts. While Iriani & Lelatobur (2024) evaluated professional responsibility and determined that both male and female educators exhibited equivalent high levels of this attribute. They also raise critical questions about how teacher education programs can more equitably foster ethical competencies across diverse student populations.

Methodology

This study adopted a survey research design chosen to address the research objectives. The authors' institution granted ethical approval (ethical clearance No. 585-594/2567).

Participants

Volunteer sampling was used to collect data from a total of 327 *beginning teachers* (Kru RakThin Cohort 1), 285 principals of the schools where the *beginning teachers* were appointed, and 327 inservice teachers who were assigned as mentors to the *beginning teachers* in their respective schools, who completed the online survey. *Beginning teachers* had 317 valid responses (females: 256, 83.6%; males: 52, 16.4%), school principals had 70 valid responses (47.62%), and mentor teachers had 77 valid responses (52.38%). It is noted that due to the method of sourcing

participants, the sample was not a random one. The participants' demographic information is presented in Table 2 and Table 3.

Table 2: ***Demographic Information of the Beginning Teachers***

Variables/graduation major	**Primary Education**		**Early Childhood Education**		**Total**	
	n	%	n	%	n	%
Gender						
Male	27	51.92	25	48.08	52	16.40
Female	97	36.60	168	63.40	265	83.60
Education Institutions						
Public Universities	33	50.77	32	49.23	65	20.50
Rajabhat Universities	91	36.11	161	63.89	252	79.50
Universities						
Kalasin University	1	3.13	31	96.88	32	10.09
Kanchanaburi Rajabhat University	0	0.00	23	100.00	23	7.26
Kamphaeng Phet Rajabhat University	31	100.00	0	0.00	31	9.78
Pibulsongkram Rajabhat University	0	0.00	31	100.00	31	9.78
Yala Rajabhat University	27	100.00	0	0.00	27	8.52
Suratthani Rajabhat University	2	7.14	26	92.86	28	8.83
Muban Chombueng Rajabhat University	0	0.00	23	100.00	23	7.26
Chiang Rai Rajabhat University	0	0.00	30	100.00	30	9.46
Chiang Mai Rajabhat University	3	9.68	28	90.32	31	9.78
Loei Rajabhat University	31	100.00	0	0.00	31	9.78
Chiang Mai University	29	96.70	1	3.30	30	9.46
School Context						
highland regions	81	38.39	130	61.61	211	66.56
border zones	21	30.88	47	69.12	68	21.45
island communities	6	28.57	15	71.43	21	6.62
disaster-prone areas	16	94.12	1	5.88	17	5.37
Total	124	39.12	193	60.88	317	100.00

Table 3: ***Demographic Information of Stakeholders***

Gender/ Stakeholders	School contexts								Total	
	Highland regions		Border zones		Island communities		Disaster-prone areas			
	n	%	n	%	n	%	n	%	n	%
Male										
Mentor teachers	4	7.55	0	0.0	0	0.0	1	1.89	5	9.43
School principals	35	66.04	6	11.32	5	9.43	2	3.77	48	90.57
Total males	39	73.58	6	11.32	5	9.43	3	5.66	53	100.0
Female										
Mentor teachers	45	47.87	14	14.89	10	10.64	3	3.19	72	76.60
School principals	7	7.45	10	10.64	3	3.19	2	2.13	22	23.40
Total females	52	55.32	24	25.53	13	13.83	5	5.32	94	100.0
Total	91	61.90	30	20.41	18	12.24	8	5.44	147	100.0

Research Instruments

Two distinct sets of research instruments were employed to correspond with the characteristics of different respondent groups. Given the recognized limitations of self-assessment, the data collection process was expanded to incorporate perspectives from relevant stakeholders, with the aim of enhancing the accuracy, validity, and objectivity of the findings. Accordingly, an additional sample group was included in the study design.

Instruments for Beginning Teachers. Four structured questionnaires were adapted from instruments developed by Erawan (2022), The discrimination indices (r) were found using item-total correlation analysis, and the reliability coefficients (Cronbach's alpha, α) were calculated for each questionnaire, showing good internal consistency and covering these areas: 1) Self and Professional Development—24 items (r=0.367–0.814; α=0.957), 2) Teacher Self-Efficacy—12 items (r=0.560–0.772; α=0.916), RQ—42 items (r=0.618–0.828; α=0.945), and 4) professional ethics attributes—9 items (r=0.565–0.873; α=0.923). All items utilized a 6-point Likert scale ranging from 0 (not at all) to 5 (to the greatest extent). Researchers can potentially reduce central tendency bias by using even-numbered scales (4, 6, 8, or 10 points) to guide respondents toward a specific side of the scale (Kusmaryono & Wijayanti, 2022), and the 6-point scale might appear to measure traits more accurately (Chang, 1994). However, instrument validation was conducted using a pilot sample of 67 beginning teachers who studied under the patronage of Her Royal Highness Princess Maha Chakri Sirindhorn (cohorts 4 and 5), who share similar characteristics with the Kru RakThin (cohort 1).

Instruments for School Principals and Mentor Teachers. A separate set of four questionnaires was administered to school principals and mentor teachers to assess their perceptions of the beginning teachers in the following domains: 1) Self and Professional Development—48 items, 2) Teacher Self-Efficacy—12 items, 3) RQ—15 items, 4) Professional

Ethics—18 items These instruments also employed a six-point Likert scale (0 to 5). Content validity was examined by three experts in educational research, each of whom possessed at least five years of relevant academic or professional experience. The Item-Objective Congruence values for all items ranged from 0.67 to 1.00, indicating an acceptable level of agreement on item relevance and clarity. The scoring criteria are presented in Appendix 1.

Data Collection

The research was conducted during the second semester of the 2024 academic year. Participants were divided into two primary groups: mentor teachers and school principals, and Kru Rak Thin instructors. Formal requests for collaboration were issued by the Faculty of Education, Mahasarakham University, to the appropriate agencies on behalf of the Kru Rak Thin teachers. The survey link was subsequently distributed via email and LINE groups, a widely used messaging platform among Thai educators, allowing for quick, convenient, and familiar access to participants. Respondents were required to register prior to completing the questionnaire, which was limited to a single submission. The data collection period for this group was from August 1 to August 15, 2024.

The group comprising mentor teachers and school principals followed a similar procedure. A formal request for cooperation was sent to the relevant agencies, and the survey link was distributed via email and telephone contact. As with the previous group, respondents were required to register before accessing the questionnaire and were permitted to submit their responses only once. The response period for this group was set from August 16 to August 30, 2024. Data obtained from both groups were analysed in accordance with the research objectives.

Data Analysis

Data analysis was conducted using descriptive statistics, including number, percentage, mean, and standard deviation, for fundamental data analysis of the sample and the rating scale questionnaire. The normality test findings indicate that the data does not follow a normal distribution ($p < 0.05$). Consequently, the hypothesis was examined using nonparametric statistics with the Mann-Whitney U Test for the difference between self and professional development, teacher self-efficacy, RQ, and professional ethics attributes based on gender (male/female), education institutions (public universities/Rajabhat universities), academic major (primary education/early childhood education)**.** The Kruskal-Wallis Test was used based on school context (highland regions/border zones/island communities/disaster-prone areas). Nonparametric tests were used: the Mann-Whitney U Test for group comparisons by gender, institution type, and major; and the Kruskal-Wallis Test by school context (highland, border, island, disaster-prone).

Results

The assessment of the self and professional development, teacher self-efficacy, RQ, and professional ethics attributes of beginning teachers yielded significant findings. While self and professional development scores were lower (average of 3.70), teacher self-efficacy scores were much higher (average of 4.24), followed by RQ scores (average of 4.04), and professional ethics scores were the highest (average of 4.44). At the .05 significance level, skewness analysis indicated that all four variables had left skewness, or negative skewness, with professional ethics traits exhibiting the most significant negative skewness (SK = -1.70).

In terms of SE SK, all characteristics were equal to 0.14, indicating that most teachers scored above average. However, standard error could be used to create confidence intervals of skewness and kurtosis, i.e., if the data had a normal distribution, the 95% confidence intervals of skewness and kurtosis could be obtained by the following formulas: skewness +/- 1.96 (SE Skew)

and s +/- 1.96 (SE Kurt), respectively. If the 95% confidence interval includes zero, then the normal distribution at the .05 statistical significance level indicates that this data set is symmetrical or that the distribution is insignificantly skewed, suggesting a normal distribution with 95% confidence intervals (Wattana Suntornchai, 2011, cited in Erawan, 2010). The analysis results indicated that the 95% confidence intervals for the skewness of the instructional strategies variable covered zero (-0.48 to 0.06), which means this variable had a statistically significant normal curve distribution at the .05 level with a confidence interval of 95%. In contrast, other variables exhibited negative skewness within a 95% confidence interval, suggesting that most teachers' scores were above average.

In the case of kurtosis (KU), it showed that teacher self-efficacy had negative kurtosis (-0.13), but other variables showed positive kurtosis, as the SE SK of all variables showed the same value of 0.27. When we looked at the 95% confidence intervals for kurtosis, we found that the intervals for self and professional development and teacher self-efficacy included zero, which means the data followed a normal distribution curve with 95% confidence, as shown in Table 4.

Table 4: ***Descriptive Statistics of the Characteristics (n=317)***

Characteristics	Mean	Std Dev	Inter-preting	SK	SE SK	Confidence Intervals of 95% of SK	KU	SE KU	Confidence Intervals of 95% of KU
1. Self and Professional Development	3.70	.79	High	-.87*	0.14	-1.14 to -.60	.20	.27	-.33 to .73
1.1. Characteristics of being a good and effective teacher	3.55	.79	High	-.69*	0.14	-.96 to -.42	.02	.27	-.51 to .55
1.2 Social skills and working in schools	3.99	.83	High	-.95*	0.14	-1.22 to -.68	.28	.27	-.25 to .81
1.3 Teacher professional competencies	3.63	.85	High	-.66*	0.14	-.93 to -.39	-.08	.27	-.61 to .45
2. Teacher Self-Efficacy	4.24	.49	High	-.44	0.14	-.71 to -.17	-.13	0.27	-.66 to .40
2.1 Student engagement	4.33	.51	High	-.51	0.14	-.78 to -.24	-.15	0.27	-.68 to .38
2.2 Instructional strategies	4.19	.53	High	-.21	0.14	-.48 to .06	-.40	0.27	-.93 to .13
2.3 Classroom management	4.19	.57	High	-.43	0.14	-.70 to -.16	-.22	0.27	-.75 to .31
3. Resilience Quotient	4.04	.74	High	-1.26	0.14	-1.53 to -0.99	1.38	0.27	0.85 to 1.91
3.1 The capacity to control emotions	4.07	.76	High	-1.17	0.14	-1.44 to -0.90	1.26	0.27	0.73 to 1.79
3.2 Patience	3.63	.78	High	-1.05	0.14	-0.77 to -0.23	.16	0.27	-0.37 to 0.69
3.3 Commitment to life and future	4.10	.84	High	-1.05	0.14	-1.32 to -0.78	.59	0.27	0.06 to 1.12
3.4 Optimism	4.18	.81	High	-1.22	0.14	-1.49 to -0.95	1.07	0.27	0.54 to 1.60
3.5 Faith in living	4.18	.84	High	-1.28	0.14	-1.55 to -1.01	1.23	0.27	0.70 to 1.76
4. Professional ethics attributes	4.44	.74	Highest	-1.70	0.14	-1.97 to -1.43	2.76	.027	2.23 to 3.29

Note * Significant at $p < 0.05$ level

A comparison of self and professional development, teacher self-efficacy, RQ, and professional ethics attributes among new teachers, looking at differences based on gender, major, and schools, using the Mann-Whitney U test showed that (as shown in Table 5):

2.1 Self and professional development, teacher self-efficacy, RQ, and professional ethics attributes of beginning teachers of both males and females were not different. (Asymp. Sig. = 0.287, 0.777, 0.681, and 0.601, respectively).

2.2 Self and professional development and professional ethics attributes of beginning teachers of both graduation majors, Primary Education and Early Childhood Education**,** were not different (Asymp. Sig. = 0.098 and 0.059, respectively). However, we found statistically significant differences in teacher self-efficacy and RQs. (Asymp. Sig. = 0.002 and 0.004, respectively).

2.3 Self and professional development, teacher self-efficacy, RQ, and professional ethics attributes of beginning teachers at both public universities and Rajabhat universities were not different. (Asymp. g. = 0.168, 0.709, 0.851, and 0.412, respectively).

Table 5: ***Testing Differences in key Teacher Attributes Among Beginning Teachers by Gender and Major Using Man - Whitney U Test***

Variables	**Self and Professional Development**		**Teacher Self-Efficacy**		**Resilience Quotient**		**Professional Ethics Attributes**	
Gender	Male	Female	Male	Female	Male	Female	Male	Female
N	52	265	52	265	52	265	52	265
Mean Rank	171.38	156.57	155.72	159.64	163.77	158.06	164.90	157.84
Sum of Ranks	8911.50	41491.50	8097.50	42305.50	8516.00	41887.00	8575.00	41828.00
Mann-Whitney U	6246.500		6719.500		6642.000		6583.000	
Sig.	0.287		0.777		0.681		.601	
Graduation Major	Primary Education	Early Childhood Education	Primary Education	Early Childhood Education	Primary Education	Early Childhood Education	Primary Education	Early Childhood Education
N	124	193	124	193	124	193	124	193
Mean Rank	148.38	165.82	138.89	171.92	140.55	170.85	147.20	166.58
Sum of Ranks	10649.500	32003.50	17222.00	33181.00	17428.00	32975.00	18252.50	32150.50
Mann-Whitney U	0.098		9472.000		9678.000		10502.500	
Sig.			**0.002**		**0.004**		.059	
Universities	Public	Rajabhat	Public	Rajabhat	Public	Rajabhat	Public	Rajabhat
N	65	252	65	252	65	252	65	252
Mean Rank	172.95	155.40	162.78	158.03	160.90	158.51	167.08	156.91
Sum of Ranks	11242.00	39161.00	10580.50	39822.50	10458.50	39944.50	10860.50	39542.50
Mann-Whitney U	7283.000		7944.500		8066.500		7664.500	
Sig.	0.168		0.709		0.851		0.412	

Self and professional development, teacher self-efficacy, and professional ethics attributes over beginning teachers of school context were not different (Asymp. Sig. = 0.035, 0.168, and 0.099, respectively). However, there was a statistically significant difference in RQ between teachers working in highland areas and those in island communities (Sig. = 0.009). (As shown in Table 6):

Table 6: ***Testing Differences in key Teacher Attributes Among Beginning Teachers by School Context Using Kruskal Wallis Test***

Variables	School Context	N	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.
Self and Professional Development	highland regions	211	150.53	8.607*	3	.035
	border zones	68	172.11			
	island communities	21	205.33			
	disaster-prone areas	17	154.44			
	Total	317				
Teacher Self-Efficacy	highland regions	211	155.06	5.046	3	.168
	border zones	68	170.18			
	island communities	21	186.29			
	disaster-prone areas	17	129.50			
	Total	317				
Resilience Quotient	highland regions	211	147.40	11.685*	3	.009
	border zones	68	176.36			
	island communities	21	204.52			
	disaster-prone areas	17	177.32			
	Total	317				
Professional Ethics Attributes	highland regions	211	152.38	6.279	3	.099
	border zones	68	170.93			
	island communities	21	196.02			
	disaster-prone areas	17	147.65			
	Total	317				

Mean and Standard Deviation Analysis of mentors' and school principals' perceptions of beginning teachers revealed that, overall, the teachers demonstrated the four key attributes at the highest level (M = 4.38, SD = 0.64). When examined by individual dimensions, professional ethics attributes were rated the highest (M = 4.57, SD = 0.72), followed by teacher self-efficacy (M = 4.44, SD = 0.51) and RQ (M = 4.35, SD = 0.75), with the subdimension *faith in life* receiving the highest mean score in that category. Meanwhile, self and professional development was also rated at a high level (M = 4.30, SD = 0.75), with the subdimension of social skills and working in schools receiving the highest mean score within that domain (see Table 7).

Table 7: Descriptive Statistics of Mentors' and School Principals' Perceptions of Beginning Teachers

Variables	Mentor Teachers (n = 77)			School Principals (n = 70)			Total		
	Mean	Std Dev	Inter-preting	Mean	Std Dev	Inter-preting	Mean	Std Dev	Inter-preting
1. Self and Professional Development	4.34	.72	High	4.26	.78	High	4.30	.75	High
1.1. Characteristics of being a good and effective teacher	4.38	.68	Highest	4.31	.79	High	4.34	.73	High
1.2 Social skills and working in schools	4.44	.76	Highest	4.38	.79	Highest	4.41	.78	Highest
1.3 Teacher professional competencies	4.27	.77	High	4.17	.83	High	4.22	.80	Highest
2. Teacher Self-Efficacy	4.37	.50	Highest	4.50	.52	Highest	4.44	.51	Highest
2.1 Student engagement	4.40	.55	Highest	4.48	.57	Highest	4.44	.56	Highest
2.2 Instructional strategies	4.36	.54	Highest	4.50	.57	Highest	4.43	.56	Highest
2.3 Classroom management	4.36	.52	Highest	4.53	.52	Highest	4.44	.53	Highest
3. Resilience Quotient	4.36	.73	Highest	4.34	.79	High	4.35	.75	Highest
3.1 The capacity to control emotions	4.30	.78	High	4.32	.81	High	4.31	.79	High
3.2 Patience	4.27	.79	High	4.27	.86	High	4.27	.82	High
3.3 Commitment to life and future	4.33	.77	High	4.30	.83	High	4.32	.80	High
3.4 Optimism	4.41	.72	Highest	4.37	.77	Highest	4.39	.74	Highest
3.5 Faith in living.	4.48	.73	Highest	4.44	.81	Highest	4.46	.77	Highest
4. Professional ethics attributes	4.55	.75	Highest	4.59	.70	Highest	4.57	.72	Highest
Total							4.38	.64	Highest

Findings from Frequency and Percentage Analysis of Additional Comments

An examination of the frequency and proportion of supplementary comments from stakeholders indicated that 74 respondents provided qualitative feedback. The three most cited themes were as follows: 1) The predominant theme (n = 28, 28.00%) highlighted that the Kru Rak Thin program is an invaluable initiative that cultivates high-quality educators dedicated to their local communities. Participants emphasized that the program offers educational opportunities for disadvantaged students and fosters sustainable local development. 2) The second most prevalent remark (n = 17, 22.97%) indicated that Kru RakThin teachers are knowledgeable, proficient, and adept at executing their responsibilities effectively. These teachers were perceived as being able to apply their skills and knowledge professionally and meaningfully in their teaching roles. 3) The third most frequent theme (n = 10, 13.51%) suggested the need for ongoing and continuous self-development among beginning teachers to keep up with

educational changes. Specific areas for development included classroom management techniques, multigrade teaching strategies, educational technology, community-based curriculum development, and foreign language proficiency.

Discussion

The results indicated that beginning teachers in the program demonstrated a significant degree of self and professional development. This phenomenon can be ascribed to their robust intrinsic motivation, dedication to the teaching profession, and the assistance provided by the EEF scholarship program, which facilitated their return to serve their home communities. The results align with the research of Day (1999) and Avalos (2011), emphasizing that teacher professional development is an ongoing and reflective process that enhances teaching quality. Designated areas require enhancement. Teachers exhibited moderate proficiency in instructing multigrade and inclusive classrooms, highlighting broader national challenges in the implementation of inclusive education, as observed by Nimtalung (2009) and Florian & Black-Hawkins (2011). Teachers displayed robust professional competencies; however, their financial literacy and English proficiency were average. This corresponds with national surveys by the Bank of Thailand (2020) and international research by Kaiser & Menkhoff (2020), revealing that many teachers lack formal training in financial management. Moreover, teachers' inadequate English proficiency reflects national trends (Pajontrapak et al., 2021; Mae Fah Luang Foundation under Royal Patronage, 2025; Baker et al., 2012) and represents a significant barrier to effective instruction, especially in a globalized educational environment. These findings highlight the necessity for focused interventions in financial literacy and English language proficiency as essential components of continuous teacher support.

The research indicated that beginning teachers in the program exhibited a notable level of teacher self-efficacy (M = 4.24, SD = 0.49), with the highest scores in student engagement (M = 4.33), followed by classroom management (M = 4.19) and instructional strategies (M = 4.19). The results indicate that teachers exhibit considerable confidence in their teaching abilities, presumably linked to the quality of pre-service training and the motivational assistance offered by the scholarship program. This corresponds with Bandura's (1997) concept of self-efficacy, which underscores the significance of confidence in one's ability to execute particular tasks. Persistence, adaptability, and effective pedagogical strategies are associated with improved teacher efficacy. The results correspond with Tschannen-Moran and Hoy's (2001) *Teacher Sense of Efficacy* model, which identifies the same three dimensions as essential for effective teaching. Klassen and Tze (2014) present further evidence indicating positive correlations between teacher self-efficacy and instructional planning, student relationships, and responsiveness to learner diversity across diverse educational systems. In the Thai context, Erawan (2022) documented elevated teacher self-efficacy among Kru Khruwattanawithi educators (M = 4.20), thereby corroborating the uniformity of these results across analogous teacher development initiatives.

The research indicated that beginning teachers exhibited a significant overall RQ (M = 4.04, SD = 0.74). The most highly rated dimensions were faith in life and optimism, signifying a robust foundation of positive attitudes and spiritual grounding, which are crucial for managing professional and personal challenges. The dimensions with the poorest ratings were patience and adaptability to changing circumstances, with the item 'ability to adapt to new situations' obtaining the lowest score (M = 3.40, SD = 0.91). This signifies a relative vulnerability in emotional regulation when faced with stress or transitions, particularly in demanding academic environments. These findings align with Masten's (2001) definition of resilience as the process of positive adaptation in the face of adversity, and the Department of Mental Health's (2020) conceptualisation of the RQ, which encompasses emotional stability, self-motivation, and problem-solving capabilities. Southwick and Charney (2018) emphasised emotional regulation and psychological flexibility as essential elements of resilience, indicating that diminished

adaptability may necessitate focused assistance in emotional coping strategies. Comparable trends were observed in Erawan's (2022) investigation of Kru Khruwattanawithi educators, where RQ attained a commendable average rating (M = 3.63); however, the lowest evaluations were consistently recorded in patience, underscoring the imperative for focused enhancement in this facet of resilience among novice educators.

The results revealed no notable gender disparities among beginning teachers regarding self and professional development, teacher self-efficacy, RQ, and professional ethics attributes. This indicates that the teacher preparation program associated with the Kru Rak Thin initiative has successfully facilitated the comprehensive development of both male and female educators equally. The results correspond with previous research by Erawan (2022), which indicated no differences between male and female educators concerning analogous traits within the Kru Khruwattanawithi program. Ali (2019) similarly found that various demographic factors—namely gender, age, marital status, education level, and professional background—had no substantial impact on the self-development needs of teachers in Pattani province, Thailand. Comparable patterns have also been observed worldwide. Bedia (2015) found no significant gender differences in teacher self-efficacy among 678 primary and secondary school teachers in Turkey. The findings indicate that there is no significant difference in RQ between male and female teachers, which is consistent with previous studies (Zhang & Luo, 2023; Mustofa et al., 2024). However, other research suggests that gender may influence resilience. Marta et al. (2023) observed that female adolescents aged 15–18 exhibited higher RQ scores than males. In contrast, Lee (2023) reported that Malaysian male employees and individuals aged 50 and above had higher RQ scores than their younger counterparts. Collectively, these findings highlight the importance of designing teacher development programs that address individual competencies across demographic differences, and they underscore the potential of both male and female novice teachers to thrive under equitable support systems.

The results indicated that beginning teachers from both primary and early childhood education backgrounds demonstrated comparable levels of self and professional development, along with compliance with professional ethics. Notable disparities were observed in teacher self-efficacy and RQ, with early childhood education instructors achieving superior scores in both domains. This disparity can be attributed to the distinctive characteristics of early childhood education, in which educators significantly influence the foundational aspects of children's cognitive, emotional, and social development. The Office of the Education Council (2012) states that early childhood educators are considered to have a significant impact on children's development, second only to that of parents. Their responsibilities encompass not only caregiving but also the development of children's self-perception, emotional stability, and learning capacity, potentially improving their self-efficacy and RQ. Evidence substantiates this interpretation. Rodpirom (2022) highlighted the necessity for early childhood educators to have robust self-awareness, confidence, and emotional attunement, which are essential components of resilience. Their primary characteristics—playfulness, patience, optimism, and commitment—are associated with higher levels of RQ. The findings correspond with those of Erawan (2022), who reported similarly high efficacy scores among novice teachers in the Kru Khruwattanawithi program. The findings suggest that early childhood education characteristics may improve teacher self-efficacy and relational quality, likely due to the increased personal investment and emotional involvement required when working with young children. In addition, the implementation of regional university learning centres to connect with communities in developing teachers' capacities in alignment with the lived context of local life has proven effective. This initiative helped participants gain qualifications while directly contributing to the needs of their communities. (Barry & Samson, 2025).

The study found no significant differences in self and professional development, teacher self-efficacy, RQ, and professional ethics attributes between beginning teachers who graduated from

public universities and those from Rajabhat universities. This discovery underscores the effectiveness of teacher preparation programs across diverse institutional categories that comply with the standards set by the Teachers' Council of Thailand and national higher education frameworks. Teacher self-efficacy, which refers to the belief in one's ability to teach effectively, is predominantly shaped by experiential and psychological factors rather than by institutional affiliation. According to Bandura (1997), self-efficacy is developed through four main sources: mastery experiences, vicarious experiences, social persuasion, and emotional states. These elements transcend pre-service education and persist in development through practical teaching experiences, reflective practice, and continuous support. Tschannen-Moran and Hoy (2001) similarly asserted that teacher self-efficacy is more significantly influenced by classroom experience than by the prestige or classification of the university attended. This suggests that post-graduation professional development systems are critical to strengthening teacher confidence and instructional capacity. Regarding RQ, the absence of differences between graduates from different institutions supports the notion that resilience is shaped primarily by personal experiences and social learning rather than academic settings. Masten (2001) identified resilience as "*ordinary magic*" (p. 227) arising from consistent interactions, stable relationships, and reflective self-awareness. Rutter (1987) argued that internal factors, such as personal goal setting and adaptive coping strategies, are essential in the development of resilience. Professional ethics exhibit similarity across different institutions, suggesting that the moral and ethical conduct of educators is predominantly shaped by wider social, cultural, and familial influences, rather than being solely dictated by the educational institution. This corresponds with Kohlberg (1981) theory of moral development, which asserts that ethical reasoning evolves through stages influenced by social experiences and personal moral contemplation, rather than by formal education. The findings indicate that although teacher preparation institutions offer a crucial foundation, qualities such as efficacy, resilience, and ethics are fundamentally linked to personal development and lifelong learning, necessitating ongoing support beyond initial training.

The study indicated no significant disparities in self and professional development, teacher self–efficacy, or professional ethics characteristics among beginning teachers across diverse geographical settings, such as highland areas, border zones, islands, and disaster-prone regions. This signifies that the standardised and rigorous teacher preparation process employed by the Kru Rak Thin program has successfully cultivated essential competencies across various teaching environments. Teachers who return to their home communities have a strong connection to the familiar local environment. Because individuals can see the benefits of their contributions to the community and feel appreciated for their efforts, this sense of integration improves their general job satisfaction and contentment in their professional responsibilities. On the other hand, educators from outside the area could find it challenging to understand and respect Indigenous cultures, which often have complex and delicate traits. Without this understanding, kids can encounter ethnic difficulties and experience a sense of alienation from their group. (Macdonald et al., 2025).

A notable disparity was observed in the RQ between teachers in highland regions and those in island locations, with teachers from islands achieving higher scores (Sig = .006). This can be ascribed to contextual factors. Teachers in highland areas often face physical isolation, extreme temperatures, and limited resource availability, which may increase stress and prevent long-term emotional adjustment. In contrast, island communities frequently preserve interdependent, tightly knit social networks that provide substantial emotional and communal support, despite the challenges they face with transportation. This observation aligns with Southwick and Charney's (2018) resilience framework, which emphasises the importance of social support, emotional regulation, and positive outlooks. The study found a strong correlation between social support and psychological adjustment, indicating that individuals who perceive higher levels of social support generally exhibit better psychological adaptation. This highlights the importance

of social connections in mental health (Zell & Stockus, 2025). In closely-knit island communities, such support systems are more accessible, thus promoting greater emotional resilience. The findings align with the Thai Department of Mental Health (2020), which highlights support from others as a core component of RQ, influencing individuals' capacity to handle emotional difficulties. In conclusion, although essential teacher attributes seem to be consistent across various geographic contexts, emotional resilience may be considerably influenced by environmental and social factors, especially the level of community integration and support.

Conclusion

The Kru RakThin Project is an initiative designed to produce educators to mitigate educational disparities in rural regions of Thailand. The Equitable Education Fund oversees a project that identifies and selects high school seniors from rural areas, offering scholarships for participation in teacher education programs at universities nationwide. Following graduation, these individuals are designated by the Ministry of Education to serve as government educators in their localities. Findings from this study indicate that graduates from the first cohort of the program exhibit high levels of personal and professional development, teacher self-efficacy, emotional and psychological resilience, and professional ethics. These results provide critical information to guide the ongoing support and continuous professional development for this cohort of educators. Furthermore, the findings aid in the planning and refinement of teacher preparation for current student teachers in the program, while also informing policy-level advancements in teacher preparation programs, pedagogical practices in faculties of education, and the practicum aspect of the project to improve overall efficacy.

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Appendix 1

The scoring criteria for all tools were calculated by sizing the score range for each step, then it was used to determine the score in each range which the score range size was (highest-lowest

score) /6 therefore, the range size was (5-0) /6 that was 0.83. (Sunthornchai, 2021 cited in Erawan, 2010). Therefore, the score for each range size was as follows:

Level	Score Range	Interpretation
1	0.00-0.82	Not having these attributes.
2	0.83-1.65	Having these attributes at the lowest level
3	1.66-2.48	Having these attributes at a low level
4	2.49-3.31	Having these attributes at a moderate level
5	3.32-4.34	Having these attributes at a high level
6	4.35-5.00	Having these attributes at the highest level

Appendix 2

Resilience Quotient (RQ) components

The ability to regulate emotions is the first component, with five indicators
1) Awareness and understanding of one's own emotions,
2) Managing and expressing emotions in a way that respects others,
3) Taking ownership of one's emotional actions
4) Capacity to control emotions and inclinations in diverse contexts,
5) Using humour or appropriate stress-reduction techniques.
Patience is the second component with four indicators:
1) The capacity to maintain composure and reason in stressful or difficult circumstances,
2) The capacity to identify suitable solutions in the face of challenges,
3) The ability to wait for the ideal time and results,
4) The ability to adjust to different situations without losing emotional equilibrium.
The third component is commitment to life and the future with four indicators
1) Establishing specific, well-defined objectives in life, like those related to education or employment,
2) Organizing and carrying out the necessary steps to accomplish those objectives,
3) Exhibiting a sustained commitment to doing good over time,
4) Remaining strong and resolute in the face of challenges.
The fourth component is optimism with six indicators:
1) Having a positive self-perception, as well as accepting and valuing oneself,
2) Being proud of one's achievements and value,
3) Behaving with goodwill, kindness, and compassion toward others,
4) Keeping an optimistic outlook while dealing with issues
5) Exhibiting optimism and drive despite hardship,
6) The ability to ask for assistance when one is aware of their limitations.
The fifth component is faith in living with three indicators
1) Belief that one's life can benefit others and society, with a spirit of altruism,
2) Ability to distinguish right from wrong through reasoned judgment, and
3) Faith in virtue and morality: acting ethically without expecting rewards.