Professional Madrasah Teachers in Teaching: The Influence of Gender and the Length of Certification of Madrasah Teachers

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**Abstract**

Developing professional madrasah teachers are increasingly popular in the teaching classrooms. But regarding developing professional madrasah teacher accuracy in teaching, mixed results are reported without clear reasons for this. This article addresses the impact of gender and length of certification on developing professional madrasah teacher accuracy in teaching classrooms. To develop the accuracy of the developing professional madrasah teacher, madrasah teacher length of certification and gender are used as a reference. A research project, which deals with the developing professional teacher in madrasah teachers using questionnaires, was carried out in two types of Madrasah Aliyah (public and private madrasah) at seventy-five madrasahs. Data from 325 madrasah teachers were collected and involved in this research. This analysis is differentiated based on the level, gender, and level of the length of certification of madrasah teachers in the...
developing professional teacher competencies being assessed. The results show that the accuracy of the developing professional teacher is low and is related to the gender of the madrasah teacher, that men perceive themselves to be higher in the developing professional teacher than women, and that even length of certification analysis with developing professional competence and implementation in the classroom. Madrasah teacher length certification more than 10 years are higher than teachers who certified between 5-10 years and more accurate than teachers who certified less than 5 years with the ability to developing professional madrasah teacher that is low. It is necessary to examine the reasons behind this difference and to look for steps to improve the accuracy of the developing professional madrasah teacher.

**Keywords:** certification, gender, madrasah teachers, professional teacher

**A. Introduction**

Professional teaching has shown an increasing tendency towards student-centered teaching and the madrasah learning process. In any teacher profession that incorporates the principles of autonomy and self-regulation in its daily functions, people must recognize professional teaching and direct their learning throughout their careers. One of the responsibilities of the teacher is to teach students to behave like professionals; that is, they must be able to give and receive feedback and develop argumentation skills, dialogue, as a way to improve their professional competence (Kennedy, 2016). One area in which teachers show their responsibility is in the development of learning, which refers to the development of teaching competence in learning, especially the development of creative thinking, encouraging the ability of argumentation, the ability to accept criticism, and the development of social attitudes.

The teaching competence of individual madrasah teachers in professional teaching presents a range of advantages (Arifin et al., 2020; Dunn & Doolittle, 2020; Evans, 2014; Kimathi & Rusznyak, 2018; Gore et al., 2017; Tambak, et al. 2020), which can be summarized as follows. This helps develop teaching competencies that are highly valued in the teaching profession, such as a critical attitude towards their work. This increases the involvement of teachers in their profession and teaching. This gives teachers time to spend on assignments with the development of larger professional teachings. Specifically, regarding the development of oral presentation competencies, professional teaching leads to an increase in learning activities, learning with high academic content, confidence in making better presentations, and developing professional teaching skills (Gore et al., 2015; Dunn & Doolittle, 2020). The professional teaching is maintained (Gore et al., 2016; Ullah & Jundran, 2014), although the accuracy is less than optimal.

However, the practical application of professional teaching in the madrasah education system is limited (Ullah & Jundran, 2014; Kimathi & Rusznyak, 2018; Goldhaber, 2015), especially if it is used to develop students' critical abilities (Louws et al., 2017),
because the teacher thinks the implementation of the competence of professional teaching is not accurate enough (Theelen et al., 2020; Baeten & Simons, 2014; Jurkowski & Müller, 2018). If professional teaching makes students think about themselves good or bad in several fields of knowledge, basing their personal decisions on wrong interpretations, problems arise at the educational and personal level (Arifin et al., 2020). Thus, if the accuracy of the professional teaching can be guaranteed by comparing it with learning competencies from other sources (Jurkowski & Müller, 2018; Arifin et al., 2020; Theelen et al., 2020), they can contribute to developing quality learning, students' critical attitudes towards their work, stimulate their continued learning in the academic and professional fields. Resources used to calibrate the professional teaching include the suitability of the teaching competence with the material and the implementation of the teaching competence in the classroom (Gore et al., 2017; Jurkowski & Müller, 2018; Goldhaber, 2015; Evans, 2014).

Comparison between the suitability of the teaching competence with teaching material and the implementation of the professional teaching in classroom learning has shown better results in terms of accuracy than between the professional teaching and other teacher competence (Jurkowski & Müller, 2018; Gore et al., 2017; Pennington & Richards, 2016), mostly when global criteria, rather than multidimensional, are used (Evans, 2014). However, the suitability of the professional teacher with teaching material is not without problems. Thus, one problem related to the suitability of the professional teacher with teaching material is that the analysis of the accuracy of the chosen professional teaching with the material being taught is more complicated than the implementation of the professional teaching in classroom learning (Dunn & Doolittle, 2020; Pennington & Richards, 2016; Louws et al., 2017). Furthermore, the suitability of the professional teaching with teaching material tends to be more difficult to analyze than the implementation of professional teaching in class. Also, students' understanding of the material taught on the selection of professional teaching is less than optimal (Theelen et al., 2020). However, because students value positively the suitability of the teacher competence with teaching material and the implementation of professional teaching in classroom learning (Gore et al., 2017; Dunn & Doolittle, 2020), both sources must be considered to develop accuracy in the implementation of professional teaching in learning.

However, the literature that examined the accuracy of professional teaching did not offer strong results. Thus, in studies that support accuracy, the level of accuracy, generally determined using a correlation index, is usually positive, but without getting a Pearson value above 0.6 (Arifin, Nurtanto, Warju, Rabiman, & Kholifah, 2020). For example, empirical results that show a high degree of accuracy are reported in Akiba & Liang (2016) and Liu & Hallinger (2018) while research by Baeten & Simons (2014), Jurkowski & Müller (2018), Aadland et al. (2017), Kimathi & Rusznyak (2018) and Wu et al. (2018) among others, show a low level of accuracy. The literature shows a series of methodological and psychological reasons for disagreement about the accuracy of the professional teaching (Kennedy, 2016; Gore et al., 2017; Gore et al., 2015; Howell & Saye, 2016).
These problems indicate the need for a series of preventative measures to increase the success of professional teaching. Thus, it is first necessary to have a more valid and reliable standard for comparing the professional teaching, for example, by using more than one teacher or combining the lecturer teaching period (Mæland & Espeland, 2017; Fischer, Fishman, Dede, Eisenkraft, Frumin, Foster, Lawrenze, Levy & McCoy, 2018; Sukenti & Tambak, 2020). Various studies have shown that the suitability of the teaching competence with teaching material is more accurate than the implementation of the professional teaching in class (Ramírez, Clemente, Recamán, Martín-Domínguez & Rodríguez, 2017; Du Plessis, 2015). It should be highlighted that this study supports the capacity of teachers to identify the successful use of good or bad professional teachings, but they also show that they cannot or are reluctant to apply the same standards as their own performance. Second, developing a step-by-step model that is easy to use and reliable with high accuracy raises the standard used to compare successful professional teaching. One possibility is the analysis of the density of the steps in using the teaching competence, which is a measuring tool that allows measuring the quality of madrasah teacher contributions in various fields. The accuracy of the steps can also be used to measure the level of competence using the teacher’s professional teaching. They describe, before carrying out activities, the variables to be assessed and the level of performance or completion for each (Blazar, 2015; Du Plessis, 2015; Gore et al., 2017; Mæland & Espeland, 2017; Ramírez et al., 2017). Implementation of the accuracy of the steps in professional teaching in the class reduces the weaknesses of the professional teaching and, therefore, leads to a higher level of teacher success for implementation professional teaching (Cordingley, 2015; Jurkowski & Müller, 2018; Louws et al., 2017). Third, giving teachers and students training and experience in professional teaching, in this case, the accuracy of the teaching competence must also contribute to increasing the successful professional teaching by those who have long taught (Kimathi & Rusznyak, 2018; McMillan et al., 2016; Wu, Chao et al., 2018). Finally, attention must be paid to the differences between professional teaching. This tendency, in turn, results in the successful professional teaching offered by madrasah teachers with the duration of teaching experience as well as men and women.

Based on these considerations, there is a need; (1) To analyze the developing accuracy of a professional teacher, compared with the madrasah teacher certification length (length of certification <5 years; 5-10 years; and >10 years); (2) To find out whether the developing accuracy of the professional teacher is related to the gender of the madrasah teacher; (3) To find out whether, when classifying madrasah teachers based on the ability to develop professional teacher (that is, distinguishing between madrasah teachers with high ability of analysis of professional teaching suitability with teaching materials and the implementation of professional teaching competence that are low in class on the developing professional teacher), there is a difference in the accuracy of the developing professional madrasah teachers.
B. Literature Review

Madrasah Aliyah is a secondary level of formal education in Indonesia which is equivalent to high school. The management is carried out by the Ministry of Religion. The grade level in the madrasah aliyah travel time is the same as high school. In the second year (grade 11), Madrasah Aliyah students choose one of 4 majors, namely: Natural Sciences, Social Sciences, Islamic Religious Sciences, and Languages. At the end of the third year (grade 12), students are required to take the National Examination (Khoiriyah et al., 2021; Umam, et al., 2021). Like Senior High School, Madrasah Aliyah is divided into two, namely, general Madrasah Aliyah which is often called Madrasah Aliyah and vocational Madrasah Aliyah. Basically, the Madrasah Aliyah curriculum is the same as the high school curriculum, it's just that in Madrasah Aliyah there is a larger portion of Islamic religious education. The following subjects are taught in Madrasah Aliyah in addition to general subjects: Quran and Hadith, Aqidah and Akhlaq, Fiqh, History of Islamic Culture, and Arabic (Khoiriyah et al., 2021; Umam, et al., 2021).

Teacher professionalism in Vijaysimha's (2013) research reveals the theory that teachers in India must have several competencies that must be mastered, namely the ability to evaluate, literacy skills, personality, and the ability to manage themselves with students and the environment. Teacher professionalism in Milner's research (2017) in Sweden that teachers are those who have community professional abilities, academic professional abilities, leadership professional abilities, and environmental professional abilities. Professional teachers in this country are required to work optimally to achieve the vision and mission of the country's education to be strong in the field of education to give birth to a creative generation.

Professional teachers in the Netherlands in research theory Thoonen et al. (2011) requiring teacher involvement in professional learning activities, particularly experimentation and reflection, are strong predictors of teaching practice. Teacher self-efficacy seems to be the most important motivating factor for explaining teacher learning and teaching practice. Motivational factors also mediate the influence of school organizational conditions and leadership practices on teacher learning and teaching practice. Transformational leadership practices stimulate the learning and professional motivation of teachers and improve school organizational conditions. The theory of teacher professionalism in the research of Kesküla & Loogma (2017) taking professional teachers in Estonia, states that teacher status is related to the value system and how the perceived value of the profession depends on values. values that develop in the environment. Teachers in Estonia are required to quickly identify the neoliberal market economy to create a situation where the teacher workforce becomes a place of contestation to determine what values prevail in society. Teachers are required to know semi-structured life history, theories of work value, professionalism, and anthropological value theory to play the key role of teachers. If this is mastered, the rapid changes that occur will not change the social value of the teacher itself. Professionalism will be well maintained and consistent.
The theory of teacher professionalism in Indonesia in Tambak & Sukentis's (2020) research refers to the Law of the Republic of Indonesia No. 14 of 2005 concerning Teachers and Lecturers, as well as Regulation of the Minister of National Education No. 16 of 2007, Government Regulation No. 74 of 2008, and Regulation of the Minister of Religion of the Republic of Indonesia No. 16 of 2010 Article 16. Competence is a set of knowledge, skills, and behaviors that must be possessed, internalized, and controlled by teachers or lecturers in carrying out professional duties”. The competence of teachers as referred to in paragraph (1) of PP Number 74 of 2008 includes pedagogic competence, personality competence, social competence, and professional competence obtained through professional education. Professionalism is a field of work that someone wants or will do. A profession is also defined as a certain position or job that requires special knowledge and skills obtained through intense academic education (Kunandar, 2014).

A profession in the context of Indonesian education is a job or position that requires certain expertise. Professionalism refers to the commitment/theory/understanding of members of a profession to improve their professional abilities and constantly developing the strategies that he uses in doing work that is in accordance with his profession (Mudlofar, 2013), continuously develop themselves as teachers (Sutarmanto, 2014; Sukenti et al., 2021). The success of teachers in carrying out education and learning cannot be separated from their competence. The teacher's performance cannot be maximized if it is not balanced with the mastery of the required professional competencies. Teacher professionalism includes the following sub-competencies; (1) mastering scientific substance related to the field of study, mastering scientific concepts in everyday life; and (2) mastering the steps of research and critical studies to add insight and deepen knowledge/materials in the field of study (Wahyudi, 2010). The professionalism of Indonesian madrasah teachers refers to the competence of Indonesian professional teachers, namely the Law of the Republic of Indonesia No. 14 of 2005 concerning Teachers and Lecturers, as well as the Regulation of the Minister of National Education No. 16 of 2007, Government Regulation No. 74 of 2008, and the Regulation of the Minister of Religion of the Republic of Indonesia. Number 16 of 2010 Article 16. Competence is a set of knowledge, skills, and behaviors that must be possessed, internalized, and controlled by teachers or lecturers in carrying out professional duties”. The competence of teachers as referred to in paragraph (1) of PP Number 74 of 2008 includes pedagogic competence, personality competence, social competence, and professional competence obtained through professional education. Especially for madrasa teachers, based on the Regulation of the Minister of Religion of the Republic of Indonesia Number 16 of 2010 Article 16, one more competency is added, namely leadership competence.

C. Research Methodology

A research project carried out during 2019 in two types of Madrasah Aliyah: public and private madrasah at seventy-five madrasahs located in Riau, Indonesia: Public Madrasah Aliyah (permanent teacher teaching who teach subjects of Akidah Akhlak, al-Qur'an Hadith, Fiqh, and Islamic Cultural History) and private Madrasah Aliyah (permanent
teacher teaching who teach subjects of Akidah Akhlak, al-Qur'an Hadith, Fiqh, and Islamic Cultural History). Previously, 194 madrasah teachers participated (69 men and 125 women), while 131 teachers (52 men and 79 women) participated in the latter.

Experience consists of carrying out learning by professional teaching competencies in teachers in the teaching classroom. The developing professional teacher was measured by a questionnaire containing eight criteria that were previously validated (Verano-Tacoronte et al., 2016). The eight criteria in the questionnaire consist of pedagogic competence; professional competence; personality competence; social competence; leadership competence; teaching skills; the ability to plan, conduct and carry out learning evaluations; and continuous learning innovation capabilities. All instruments have been tested for validity (p<0.05) and reliability, where the reliability is (0.92) which has met the standard in inferential statistics. Each developing professional teacher was measured by teachers in two types of madrasah: public Madrasah Aliyah and private Madrasah Aliyah. The developing professional teacher was given to all teachers and they responded to the questionnaire statement according to their respective conditions. The reliability of the questionnaire answered by the teacher was tested through consistency between teachers using Cronbach's alpha (García-Ros, 2011; Cortina, 1993). Good internal consistency is found in both madrasahs for each teacher.

To assess the accuracy of developing a professional teacher (first specific goal), graphical analysis is carried out from the coincidence level in the answers provided by the four ranking sources. Two-sample equality of means test was also carried out. To examine the possible relationship between the developing professional teacher and gender (the second specific goal), data is broken down based on the gender of the teacher, and basic descriptive statistics are analyzed for both programs; Equivalence test means carried out. Finally, linear correlations between developing professional teachers were analyzed with simple linear correlation coefficients, and to determine other types of monotonic relationships, Spearman's rank correlation coefficients were also calculated.

Graphical analysis was conducted to detect differences in the accuracy of developing professional teachers from the subsample of teachers with the ability to analyze the suitability of the professional teaching competence with teaching materials and the madrasah teacher with the ability to carry out the implementation of professional teaching competence in teaching classroom (third specific goal) on each madrasah. The placement of teachers in one group or another is determined by establishing confidence intervals for individual groups of programs and relevant genders. Teachers who are outside the interval are constructed as an average score of plus/minus standard deviation for their reference group considered the professional competence of the best/worst developing professional madrasah teacher. Finally, the multiple linear regression model to discuss the differences in professional teaching between madrasah teachers who have certification <5 years, 5-10 years, and >10 years were studied.
D. Findings

The descriptive statistics shown in Table 1 show that, among teachers who length a certification between 5-10 years, it is more common to provide responses in developing madrasah teacher as a middle position. However, madrasah teachers whose length certification < 5 years have a wider range of responses because the difference between the minimum and maximum teachers is greater at both madrasah than the range of developing of professional teachers provided by madrasah teachers who have certified less than 10 years. In terms of the development of professional teachers who have been certified more than 10 years, the level is always above the use of the minimum development of professional teachers conducted by the length certification of other madrasah teachers. The same is true for maximum responses, which shows that the development of professional madrasah teachers who have been certified over 10 years is systematically higher.

|                          | Public Madrasah Aliyah | Private Madrasah Aliyah |
|--------------------------|------------------------|-------------------------|
| Min. – Max.              | 11-28                  | 10-20                   |
| Certified teacher < 5 Years | 18-28                  | 19-27                   |
| Certified teacher 5-10 Years | 20-36                  | 20-37                   |
| Certified teacher > 10 Years | 26.81*                | 26.99*                  |
| Mean                     | 26.92*                 | 26.62*                  |
| Certified teacher < 5 Years | 29.26*                | 28.71*                  |
| Certified teacher 5-10 Years | 33.861                | 32.851                  |
| Certified teacher > 30 Years | 37.826                | 36.786                  |

Note: Mean difference by source of assessment statistically significant at 1%

The ANOVA test and the Tukey test in the next table revealed that there were no significant mean differences in the accuracy of the developing professional madrasah teachers between teachers who certified less than 5 years, teachers who certified 5-10 years, while the difference between the three and teachers who have certified for more than 10 years was statistically significant in both degrees, although they were more prominent in public Madrasah Aliyah teachers than in private Madrasah Aliyah teachers. In fact, teachers who certified <5 years, teachers who certified 5-10 years, can be considered as homogeneous groups according to the scores given at all three levels.
Table 2. Descriptive and ANOVA statistics of the total score awarded to the implementation developing professional madrasah teacher, by the Madrasah Aliyah education and gender of the teacher

|                                | Public Madrasah Aliyah | Private Madrasah Aliyah |
|--------------------------------|------------------------|-------------------------|
|                                | Man   | Woman | Man   | Woman |
| Number of madrasah teacher     |       |       |       |       |
| Min. – Max.                    |       |       |       |       |
| Certified teacher < 5 years    | 14-29 | 12-28  | 14-25 | 11-29  |
| Certified teacher 5-10 years   | 17-27 | 17-26  | 19-25 | 18-26  |
| Certified teacher > 10 years   | 19-35 | 19-35  | 19-36 | 19-35  |
| Mean                           |       |       |       |       |
| Certified teacher < 5 Years    | 24.80*| 22.70*| 19.81*| 22.50*|
| Certified teacher 5-10 Years   | 24.91*| 23.80*| 22.92*| 23.21*|
| Certified teacher > 10 Years   | 27.25*| 25.27*| 26.25*| 25.34*|
| Standard Deviation             |       |       |       |       |
| Certified teacher < 5 Years    | 24.636| 19.632| 24.631| 20.671|
| Certified teacher 5-10 Years   | 25.630| 20.732| 26.701| 21.730|
| Certified teacher > 10 Years   | 27.176| 22.187| 28.821| 23.765|

Note: *Mean difference by gender of the teacher statistically significant at 1%

Breaking up data based on the gender of the Madrasah Aliyah teacher, we analyzed whether the developing professional teacher was maintained, regardless of gender. On average, teachers who certified between 5-10 years score skills professional teacher higher than teachers who length certification less than 5 years, including madrasah teachers who certified between 5-10 years, regardless of the gender of the madrasah teacher. In addition, the development of professional madrasah teachers who have been certified over 10 years about these skills, in general, is higher than the implementation of developing of professional madrasah teachers that certified between 5-10 years, and this is more pronounced in man than in woman. The difference is also greater in the public Madrasah Aliyah compared to the private Madrasah Aliyah, perhaps because of the greater proportion of men at the previous level.

Analyzing whether the real differences according to the gender of the developing professional teachers is statistically significant, the results show that in the field of the public Madrasah Aliyah, the rank of teachers who length certification under 5 years does not differ significantly by gender, and this also applies to the ranking of teachers who certified between 5-10 years at all three levels. Even so, differentiation by madrasah teacher gender is relevant because it becomes clear that, on average in both madrasahs, teachers who certified over 10 years are systematically higher than women, and this difference is statistically significant. With respect to incoming data, there seems to be some agreement between the rank of teachers who certified less than 5 years, teachers who certified between 5-10 years, but not between responses, and teachers who certified for more than 10 years. To further examine this relationship, correlation studies are carried out and appear in table 3.
Table 3. Linear correlation among sources of developing professional madrasah teacher by gender and aliyah madrasah education

|                        | Man |                             | Woman |                             |
|------------------------|-----|------------------------------|-------|------------------------------|
|                        | Certified teacher less than 5 years | Certified teacher 5-10 years | Certified teacher more than 10 years | Certified teacher less than 5 years | Certified teacher 5-10 years | Certified teacher more than 10 years |
| Public Madrasah Aliyah | Certified teacher less than 5 years | 1 |                          | 1 |                              |                              |
|                        | Certified teacher 5-10 years | 0.83 | 1 |                          | 0.84 | 1 |                              |                              |
|                        | Certified teacher more than 10 years | 0.24 | 0.25 | 1 |                          | -0.08 | 0.35 | 1 |                              |                              |
| Private Madrasah Aliyah | Certified teacher less than 5 years | 1 |                          | 1 |                              |                              |
|                        | Certified teacher 5-10 years | 0.72 | 1 |                          | 0.78 | 1 |                              |                              |
|                        | Certified teacher more than 10 years | 0.04 | 0.11 | 1 |                          | 0.45 | 0.49 | 1 |                              |                              |

Note: Correlation coefficient statistically significant at 1%

A high linear correlation can be seen (table 4) between the rank of madrasah teachers who certified between 5-10 years, and teachers who certified less than 5 years in the public aliyah madrasah (0.83 for men and 0.84 for women) and in the private Madrasah Aliyah (0.72 for man and 0.78 for woman). However, the linear correlation between the development of professional teachers certified over 10 years and other sources is only statistically significant for the woman in the public Madrasah Aliyah and the private Madrasah Aliyah, although at a significant level lower (0.45 with teachers certified less than 5 years, and 0.49 with teachers certified between 5-10 years).

Table 4. Rank correlation among sources of developing professional madrasah teacher by gender and Madrasah Aliyah

|                        | Man |                             | Woman |                             |
|------------------------|-----|------------------------------|-------|------------------------------|
|                        | Certified teacher less than 5 years | Certified teacher 5-10 years | Certified teacher more than 10 years | Certified teacher less than 5 years | Certified teacher 5-10 years | Certified teacher more than 10 years |
| Public Madrasah Aliyah | Certified teacher less than 5 years | 1 |                          | 1 |                              |                              |
|                        | Certified teacher 5-10 years | 0.75 | 1 |                          | 0.80 | 1 |                              |                              |
|                        | Certified teacher more than 10 years | 0.17 | 0.18 | 1 |                          | -0.13 | 0.25 | 1 |                              |                              |
| Private Madrasah Aliyah | Certified teacher less than 5 years | 1 |                          | 1 |                              |                              |
|                        | Certified teacher 5-10 years | 0.85 | 1 |                          | 0.79 | 1 |                              |                              |
|                        | Certified teacher more than 10 years | -0.02 | 0.16 | 1 |                          | 0.39 | 0.42 | 1 |                              |                              |

Note: Correlation coefficient statistically significant at 1%
Because there is almost no linear correlation detected between the development of professional teachers who certified above 10 years, teachers who certified between 5-10 years, and teachers who certified under 5 years, despite seeing the results of the questionnaire answers and using the analysis of the implementation of the professional madrasah teaching and the analysis of the accuracy of the developing of a professional teacher with the same material, non-parametric actions are also considered. So, we calculated Spearman's than 5 years based on madrasah teachers and, for the public Madrasah Aliyah and the private Madrasah Aliyah, based on gender. The sample of public Madrasah Aliyah teachers, unlike the sample of the private Madrasah Aliyah, combines both genders in each circumstance, because there is no statistically significant difference based on gender.

Teaching professional competence from teachers who carry out the professional teaching with the worst ranking of madrasah teachers who certified less than 5 years, presents a greater difference between the three categories of madrasah teacher certified length professional teaching in the two teacher madrasahs. In contrast, for teachers with high mastery of the teaching competence with material, there is a greater consensus among teachers have developing professional teaching. On the other hand, the behavior of madrasah teachers who certified less than 5 years, teachers who certified 5-10 years, and teachers who certified above 10 years do not show the same tendency: where the developing professional teacher with the implementation of professional teaching competences in class low, teachers who certified less than 5 years harder than teachers who certified 5-10 years, the teachers with the correct professional teaching according to the high material teachers who teach less than 5 years are less good than teachers who teach between 5-10 years, and above 10 years.

The multiple regression model that explores the determinants of differences between the professional teaching and the long duration of teaching revealed that man from private Madrasah Aliyah with the competency of professional teaching according to the material and high implementation of the professional teaching competence averaged 1.98 points higher than the teachers who taught less than 5 years (Table 5).

### Table 5. Multiple linear regression

|                        | Coefficient | t-values |
|------------------------|-------------|----------|
| Constant               | 1.98*       | (-1.99)  |
| Madrasah (Ref. Private Madrasah Aliyah) |             |          |
| Public Madrasah Aliyah | 1.08        | (1.36)   |
| Gender (Ref. Man)      | 3.88**      | (5.09)   |
| Woman                  |             |          |
| The accuracy of the developing professional madrasah teacher according to the material and implementation (Ref. High) | | |
| Medium                 | -9.15**     | (-9.06)  |
| Low                    | -3.24**     | (-4.21)  |

Note 1: Response variable = Score given by madrasah teacher
Note 2: ** = Significant at 1%; * = Significant at 10%
Note 3: t-values between brackets
No significant differences were detected between the teacher's length certification madrasah teachers in developing of professional madrasah teacher. Conversely, the level of professional teaching competence felt by teachers who have taught more than 10 years does have an influence. In fact, apart from teachers at two madrasah categories and gender, teachers with low developing professional madrasah teacher levels present a difference of -9.15 points more than teachers with high developing professional teacher competency levels. This difference decreases to 3.88 points for those who have an intermediate level compared to those who have a high level of professional competence.

E. Discussion

This study focuses on developing professional teacher accuracy and, more specifically, on the madrasah teachers' realistic ranking of their own developing competencies, in this case, the skills of developing professional teaching of reduction in madrasah teachers. The literature review conducted shows that research on the accuracy of the development of professional teachers offers inconclusive and less robust results (Kulgemeyer & Riese, 2018; Mena, Hennissen & Loughran, 2017; Tambak et al., 2021). There are studies that obtain high accuracy in the developing professional teaching (Fox et al., 2018; Schipper et al., 2017), while others (Gore et al., 2017; Schipper et al., 2017) report a tendency to have excessive developing professional teachers. Therefore, given that teachers 'academic and professional progress depends on making use of quality professional teachings that are not biased, this study follows the main recommendations found in the literature to evaluate appropriately the accuracy of the developing professional teaching of the teachers' discourse competence and analyze the results by considering aspects that are can influence them, such as the homogeneity of the criteria for having the professional teaching (analysis of the material with the professional teaching and implementation in class), and the difference between the users of the developing professional teacher (ie, gender, performance on the competencies analyzed).

The results show that, for the sample used, the development of professional teachers is not accurate, which is in line with the studies of Louws et al. (2017), Loughran (2019), and Herro & Quigley (2017). Although teachers who certified less than 5 years, teachers who certified 5-10 years, and teachers who certified more than 10 years score the same way, teachers usually judge the have of their own developing of professional teachers, even if they all use analysts use the same competence. Various arguments can be used to explain this situation. First, the development of a professional teacher can be influenced by its influence on the teacher's final understanding in the teacher, results in overrating compared to the source of the competence of other teacher professional teachings and makes an analysis of the developing teaching competence ineffectively. The lack of developing habits professional teacher and the fact that the teacher did not participate in identifying the skills of the developing professional teacher are other possible explanations. Finally, it coincides with the conclusion of Toom et al. (2019) and Gore et al. (2017), the difference between the development of teacher professional teachings that certified less than 5 years and above ten years may be due to the experience of teachers.
who certified longer, will be greater in analyzing the suitability of the material with the professional teaching competences and the accuracy of the developing of professional teacher in class. However, it must be remembered that madrasah teachers who are certified between 5-10 years are more accurate in the developing of professional teachers in learning among other teachers when developing professional teachers, than teachers whose length certified is more than 10 years.

Regarding differences between teachers, the results revealed that the accuracy of the development of professional teachers was related to gender. Although the developing of professional teachers of teachers who certified less than 5 years, teachers who teach 5-10 years, and teachers who certified more than 10 years are oriented in the same direction (within the public Madrasah Aliyah, the two groups found that man showed more analytical skills, professional teacher, whereas in the private Madrasah Aliyah were a woman). Competence in the development of professional teachers is not homogeneous (coinciding in the case of the public Madrasah Aliyah, but not in the private Madrasah Aliyah). In general, and irrespective of the major, man present higher scores on the development of professional teachers than the woman. In addition, no significant relationship was detected between the development of professional teaching of teachers who certified less than 5 years, teachers who teach between 5-10 years, and teachers who have certified 10 years and over the duration, except in the case of the woman in the private aliyah madrasah, although in this latter case the level of agreement was lower than that found between teachers who certified 5-10 years and developing of professional teacher length certification for less than 5 years of teaching. It is important to examine the reasons for this behavior shown by male speakers, who systematically score higher than those given by the other two collectives, despite having different branches such as the public Madrasah Aliyah and private Madrasah Aliyah.

In addition, and bearing in mind that not all madrasah teachers will behave in the same way when implementing the development of professional teaching, the findings indicate a different behavior pattern when dividing the sample according to the teacher's length certification. It seems that the analysis of the development of professional teacher makes it possible to unite the professional competencies when the madrasah teacher implementation the teaching profession is also a good competence in accordance with the criteria of teaching time. In the case of the analysis of developing of professional teacher suitability with the material and the worst implementation in the classroom from the perspective of madrasah teachers who have certified more than 10 years, the development of their professional teaching is systematically higher than teachers who certified 5-10 years, and teachers who certified less than 5 years. Apart from the analysis of the skill of the developing of a professional teacher, madrasah teachers with the ability to implement the professional of teaching in the lower class balance the implementation of their developing of professional teacher by rating themselves highly. Madrasah teacher at the private Madrasah Aliyah, this difference is even greater in man than a woman. When teachers with analytical skills using high development of professional teachers perceive the implementation of their own professional teaching competencies. The results for
teachers at the private Madrasah Aliyah deserve special attention: men give themselves
the perception of implement a higher development of professional teacher that has
certified for more than 10 years than the perception given by teachers who certified less
than 5 years, 5-10 years, while a woman tends to underestimate themselves.

Regardless of the research findings, the merger of madrasah teacher teaching time
developing of professional teaching and, above all, teachers who certified less than 5
years, 5-10 years and teachers who certified above 10 years, have positive possibilities
(Jurkowski & Müller, 2018; Limeri et al., 2020; Grise-Owens et al., 2018; Alt, 2018). An
important part of the literature considers the skill of the developing of teacher professional
teaching which has long been very useful teaching, if only because of its positive influence
on the understanding of madrasah teacher professional teaching materials. The
development of professional madrasah teachers is an effective professional teaching
competence that allows teachers to incorporate various aspects of their teachings, reflect
on their achievements, and examine the implications for their future training. Therefore,
the most useful aspect of skill development of professional teachers lies in the dimensions
of the application of its implementation in the classroom. This can enhance skills and
abilities (Gore et al., 2017; Brundiers & Wiek, 2017; Louws et al., 2017; Qadhi et al., 2020;
Tambak et al., 2020), including the capacity for lifelong teaching, beyond the strict
academic sphere (Lopes & Cunha, 2017; Kimathi & Rusznyak, 2018; Kenny, Hobbs &
Whannell, 2020; Wu et al., 2018; Tambak, 2021). Research findings show that madrasah
teachers who are certified between 5-10 years are more accurate in their development of
professional madrasa teachers than teachers who have more than 10 years of length
certification. Therefore, the experience of madrasah teachers who have certified between
5-10 years can be introduced in finding the golden teaching of teachers. Stronger
madrasah teacher involvement can be achieved. However, the development of
professional teachers can be manipulated to benefit or jeopardize the length of
certification of certain madrasah teachers, regardless of their actual performance.

F. Conclusion

We conclude that the developing of professional madrasah teacher that has certified
for more than 10 years is less accurate than teachers who have length certification of
between 5-10 years. Teachers tend to overestimate the ability to have their developing of
professional madrasah teachers. However, it is important to show that there is a significant
relationship between gender and the development of professional teacher of madrasah
teachers who certified for more than 10 years: the development of professional teachers
for male madrasah teachers who certified for more than 10 years is less accurate than
woman, regarding the developing of professional teachers for teachers who certified
between 5-10 years, and teachers who certified less than 5 years. It is necessary to examine
the reasons behind this difference and to look for professional teaching competencies to
improve the accuracy of the professional teacher.

To develop madrasah teacher professional in skill accurate and realistic professional
teachers, we propose a series of recommendations. First, increase madrasah teacher
training in developing professional teachers. Second, increase the amount of length certification experience with the analysis of the suitability of the material and professional of teaching competence, to improve their ability to developing of professional teachers (Reznitskaya & Gregory, 2013; Lewis & Holloway, 2019; Keshavarzi et al., 2016). Three, involving madrasah teachers in designing the scale of the development of professional teacher assessment (Cordingley, 2015; Jurkowski & Müller, 2018) to increase their commitment to the system.

BIBLIOGRAPHY

Aadland, H., Espeland, M., & Arnesen, T. E. (2017). Towards a typology of improvisation as a professional teaching skill: Implications for pre-service teacher education programmes. Cogent Education, 4(1), 1295835.

Akiba, M., & Liang, G. (2016). Effects of teacher professional learning activities on student achievement growth. The Journal of Educational Research, 109(1), 99-110.

Alt, D. (2018). Science teachers’ conceptions of teaching and learning, ICT efficacy, ICT professional development and ICT practices enacted in their classrooms. Teaching and Teacher Education, 73, 141-150.

Arifin, Z., Nurtanto, M., Warju, W., Rabiman, R. & Kholifah, N. (2020). The TAWOCK conceptual model at content knowledge for professional teaching in vocational education. International Journal of Evaluation and Research in Education, 9(3), 697-703. https://doi.org/10.11591/ijere.v9i3.20561.

Baeten, M., & Simons, M. (2014). Student teachers’ team teaching: Models, effects, and conditions for implementation. Teaching and Teacher Education, 41, 92-110.

Blazar, D. (2015). Grade assignments and the teacher pipeline: A low-cost lever to improve student achievement? Educational Researcher, 44(4), 213–227. doi:10.3102/0013189X15580944.

Brundiers, K., & Wiek, A. (2017). Beyond interpersonal competence: Teaching and learning professional skills in sustainability. Education Sciences, 7(1), 39. https://doi.org/10.3390/educsci7010039.

Cordingley, P. (2015). The contribution of research to teachers’ professional learning and development. Oxford Review of Education, 41(2), 234–252. doi:10.1080/03054985.2015.1020105.

Cortina, J. M. (1993). What is coefficient alpha-An examination of theory and applications. Journal of Applied Psychology, 78(1), 98-104.

Du Plessis, A. (2015). Effective education: conceptualising the meaning of out-of-field teaching practices for teachers, teacher quality and school leaders. International Journal of Educational Research, 72, 89–102. doi:10.1016/j.ijer.2015.05.005.

Dunn, R. J. & Doolittle, S.A. (2020). Professional Development for Teaching Personal and Social Responsibility: Past, Present, and Future. Journal of Teaching in Physical
Evans, L. (2014). Leadership for professional development and learning: Enhancing our understanding of how teacher develop. *Cambridge Journal of Education, 44*(2), 179-198. https://doi.org/10.1080/0305764X.2013.860083.

Fischer, C., Fishman, B., Dede, C., Eisenkraft, A., Frumin, K., Foster, B., Lawrenze, F., Levy, A. J. & McCoy, A. (2018). Investigating relationships between school context, teacher professional development, teaching practices, and student achievement in response to a nationwide science reform. *Teaching and Teacher Education, 72*, 107-121. https://doi.org/10.1016/j.tate.2018.02.011.

Fox, L., Onders, R., Hermansen-Kobulnicky, C. J., Nguyen, T. N., Myran, L., Linn, B., & Hornecker, J. (2018). Teaching interprofessional teamwork skills to health professional students: A scoping review. *Journal of Interprofessional Care, 32*(2), 127-135.

Garcia-Ros, R. (2011). Analysis and validation of a rubric to assess oral presentation skills in university contexts. *Electronic Journal of Research in Educational Psychology, 9*(3), 1043-1062.

Goldhaber, D. (2015). Exploring the potential of value-added performance measures to affect the quality of the teacher workforce. *Educational Researcher, 44*(2), 87-95. https://doi.org/10.3102/0013189x15574905.

Gore, J., Barron, R. J., Holmes, K. & Smith, M. (2016). Who says we are not attracting the best and brightest? Teacher selection and the aspirations of Australian school students. *The Australian Educational Researcher, 43*(2016), 527-549. https://doi.org/10.1007/s13384-016-0221-8.

Gore, J., Lloyd, A., Smith, M., Bowe, J., Ellis, H. & Lubans, D. (2017). Effects of professional development on the quality of teaching: Results from a randomised controlled trial of Quality Teaching Rounds. *Teaching and Teacher Education, 68*(2017), 99-113. https://doi.org/10.1016/j.tate.2017.08.007.

Gore, J., Smith, M., Bowe, J., Ellis, H., Lloyd, A. & Lubans, D. (2015). Quality Teaching Rounds as a professional development intervention for enhancing the quality of teaching: Rationale and study protocol for a cluster randomised controlled trial. *International Journal of Educational Research, 74*(2015), 82-95. https://doi.org/10.1016/j.ijer.2015.08.002.

Grise-Owens, E., Miller, J. J., Escobar-Ratliff, L. & George, N. (2018) Teaching Note—Teaching Self-Care and Wellness as a Professional Practice Skill: A Curricular Case Example. *Journal of Social Work Education, 54*(1), 180-186, DOI: 10.1080/10437797.2017.1308778.

Herro, D. & Quigley, C. (2017). Exploring teachers’ perceptions of STEAM teaching through professional development: implications for teacher educators, *Professional Development in Education, 43*(3), 416-438, DOI: 10.1080/19415257.2016.1205507.

Howell, J. B., & Saye, J. W. (2016). Using lesson study to develop a shared professional teaching knowledge culture among 4th grade social studies teachers. *The journal of social studies research, 40*(1), 25-37.
Jurkowski, S., & Müller, B. (2018). Co-teaching in inclusive classes: The development of multi-professional cooperation in teaching dyads. *Teaching and Teacher Education, 75*, 224-231. https://doi.org/10.1016/j.tate.2018.06.017.

Kennedy, M. M. (2016). How Does Professional Development Improve Teaching? *Review Educational Research, 86*(4), 945-980. https://doi.org/10.3102/0034654315626800.

Kenny, J., Hobbs, L., & Whannell, R. (2020). Designing professional development for teachers teaching out-of-field. *Professional Development in Education, 46*(3), 500-515. https://doi.org/10.1080/19415257.2019.1613257.

Keshavarzi, Z., Akbari, H., Forouzanian, S. & Sharifian, E. (2016). Comparison the Students Satisfaction of Traditional and Integrated Teaching Method in Physiology Course. *Scientific Journal of Education Strategy Medical Sciences, 8*(6), 21-27.

Khoiriyah, M., Istikomah, I., & Churrahman, T. (2021). The Role of Madrasah Committee in Managing Financial Management in Madrasah Aliyah Negeri. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam, 6*(1), 179-193. https://doi.org/10.31538/ndh.v6i1.1356.

Kimathi, F. & Rusznyak, L. (2018). Advancing professional teaching in South Africa: lessons learnt from policy frameworks that have regulated teachers' work. *Education as Change, 22*(3), 396-408. http://dx.doi.org/10.25159/1947-9417/4042.

Kimathi, F., & Rusznyak, L. (2018). Advancing professional teaching in South Africa: lessons learnt from policy frameworks that have regulated teachers' work. *Education as Change, 22*(3), 1-25.

Kulgemeyer, C., & Riese, J. (2018). From professional knowledge to professional performance: The impact of CK and PCK on teaching quality in explaining situations. *Journal of Research in Science Teaching, 55*(10), 1393-1418.

Lewis, S., & Holloway, J. (2019). Datafying the teaching ‘profession’: Remaking the professional teacher in the image of data. *Cambridge Journal of Education, 49*(1), 35-51. https://doi.org/10.1080/0305764X.2018.1441373.

Limeri, L. B., Musgrove, M. M. C., Henry, M. A., & Schussler, E. E. (2020). Leveraging Psychosocial Interventions to Motivate Instructor Participation in Teaching Professional Development. *CBE—Life Sciences Education, 19*(3), 1-12. https://doi.org/10.1187/cbe.19-11-0236

Liu, S., & Hallinger, P. (2018). Principal instructional leadership, teacher self-efficacy, and teacher professional learning in China: Testing a mediated-effects model. *Educational Administration Quarterly, 54*(4), 501-528.

Lopes, J. B., & Cunha, A. E. (2017). Self-directed professional development to improve effective teaching: Key points for a model. *Teaching and Teacher Education, 68*, 262-274. https://doi.org/10.1016/j.tate.2017.09.009.

Loughran, J. (2019). Pedagogical reasoning: the foundation of the professional knowledge of teaching. *Teachers and Teaching, 25*(5), 523-535.

Louws, M. L., van Veen, K., Meirink, J. A., & van Driel, J. H. (2017). Teachers’ professional learning goals in relation to teaching experience. *European Journal of Teacher Education, 40*(4), 487-504.

Louws, M. L., van Veen, K., Meirink, J. A., & van Driel, J. H. (2017). Teachers’ professional
learning goals in relation to teaching experience. *European journal of teacher education, 40*(4), 487-504.

Mæland, K., & Espeland, M. (2017). Teachers’ Conceptions of Improvisation in Teaching: Inherent Human Quality or a Professional Teaching Skill?. *Education Inquiry, 8*(3), 192-208.

McMillan, D.J., McConnell, B., & O’Sullivan, H. (2016). Continuous professional development—why both? Perceptions and motivations of teachers in Ireland. *Professional Development in Education, 42*(1), 150–167. doi:10.1080/19415257.2014.952044.

Mena, J., Hennissen, P., & Loughran, J. (2017). Developing pre-service teachers’ professional knowledge of teaching: The influence of mentoring. *Teaching and Teacher Education, 66*, 47-59.

Pennington, M. C., & Richards, J. C. (2016). Teacher Identity in Language Teaching: Integrating Personal, Contextual, and Professional Factors. *RELC Journal, 47*(1), 5-23. https://doi.org/10.1177/0033688216631219.

Qadhi, S., Hendawi, M., Mohammad, E. G., Ghazi, I., Al-Dosari, N., & Du, X. (2020). The Impact of a Teacher Preparation Programs on Professional Teaching Competencies—Female Novice Teachers’ Perspectives. *International Journal of Learning, Teaching and Educational Research, 19*(1), 118-135. https://doi.org/10.26803/ijlter.19.1.7.

Ramírez, E., Clemente, M., Recamán, A., Martín-Domínguez, J., & Rodríguez, I. (2017). Planning and doing in professional teaching practice. A study with early childhood education teachers working with ICT (3–6 years). *Early Childhood Education Journal, 45*(5), 713-725.

Reznitskaya, A. & Gregory, M. (2013). Student Thought and Classroom Language: Examining the Mechanisms of Change in Dialogic Teaching. *Educational Psychologist, 48*(2), 114–133.

Schipper, T., Goei, S. L., de Vries, S., & van Veen, K. (2017). Professional growth in adaptive teaching competence as a result of Lesson Study. *Teaching and Teacher Education, 68*, 289-303.

Sukenti, D., & Tambak, S. (2020). Developing Indonesian Language Learning Assessments: Strengthening the Personal Competence and Islamic Psychosocial of Teachers. *International Journal of Evaluation and Research in Education, 9*(4), 1079-1087. http://doi.org/10.11591/ijere.v9i4.20677.

Sukenti, D., Tambak, S., & Siregar, E. (2021). Learning Assessment for Madrasah Teacher: Strengthening Islamic Psychosocial and Emotional Intelligence. *AL-ISHLAH: Jurnal Pendidikan, 23*(1), 725-740. https://doi.org/10.35445/alishlah.v13i1.552.

Tambak, S. (2021). The Method of Counteracting Radicalism in Schools: Tracing the Role of Islamic Religious Education Teachers in Learning. *MIQOT: Jurnal Ilmu-ilmu Keislaman, 45*(1), 104-126. http://dx.doi.org/10.30821/miqot.v45i1.761.

Tambak, S., & Sukenti, D. (2020). Strengthening Islamic Behavior and Islamic Psychosocial in Developing Professional Madrasah Teachers. *Jurnal Cakrawala Pendidikan, 39*(1), 65-78. https://doi.org/10.21831/cp.v39i1.26001.
Tambak, S., Ahmad, M. Y., & Sukenti, D. (2020). Strengthening Emotional Intelligence in Developing the Madrasah Teachers’ Professionalism (Penguatan Kecerdasan Emosional dalam Mengembangkan Profesionalisme Guru Madrasah). Akademika, 90(2), 27-38. https://doi.org/10.17576/akad-2020-9002-03.

Tambak, S., Amril, A., & Sukenti, D. (2021). Islamic Teacher Development: Constructing Islamic Professional Teachers Based on The Khalifah Concept. Nazhruna: Jurnal Pendidikan Islam, 4(1), 117-135. https://doi.org/10.31538/nzh.v4i1.1055.

Tambak, S., Ahmad, M., Sukenti, D., & Ghani, A. R. B. A. (2020). Profesionalisme Guru Madrasah: Internalisasi Nilai Islam dalam Mengembangkan Akhlak Aktual Siswa. Jurnal Pendidikan Agama Islam Al-Thariqah, 5(2), 79-96. https://doi.org/10.25299/al-thariqah.2020.vol5(2).5885.

Theelen, H., Willems, M. C., van den Beemt, A., Conijn, R. & den Brok, P. (2020). Virtual internships in blended environments to prepare preservice teachers for the professional teaching context. British Journal of Educational Technology, 51(1), 194-210. https://doi.org/10.1111/bjet.12760.

Toom, A., Tiilikainen, M., Heikonen, L., Leijen, A., Mena, J. & Husu, J. (2019). Teacher candidate learning of action-oriented knowledge from triggering incidents in teaching practice, Teachers and Teaching, 25(5), 536-552. DOI: 10.1080/13540602.2019.1652162.

Ullah, T. & Jundran, S. (2014). Impact of district teacher educators' mentoring support on professional development of primary school teachers. The Journal of Educational Research, 17(1), 112-130.

Umam, N. R., Trimansyah, S., Kartika, I., & Iriantara, Y. (2021). The Formation of Noble Morals in Madrasah Aliyah Negeri (MAN) in West Java. International Journal of Nusantara Islam, 9(1), 106-123. https://doi.org/10.15575/ijni.v9i1.11999.

Verano-Tacoronte, D., González-Betancor, S. M. & Bolívar-Cruz, A. (2016). Valoración de la competencia de comunicación oral de estudiantes universitarios a través de una rúbrica calificable y válida. Revista Brasileira de Educação, 21(64), 39-60.

Wu, L. C., Chao, L. L., Cheng, P. Y., Tuan, H. L., & Guo, C. J. (2018). Elementary Teachers’ Perceptions of Their Professional Teaching Competencies: Differences Between Teachers of Math/Science Majors and Non-math/Science Majors in Taiwan. International Journal of Science and Mathematics Education, 16(5), 877-890.