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Language And Cultural For Being Teacher Class Inventory For Enhancing Creative Thinking Abilities Of Graduate Students In University

Prasong Saihong[1] , Chumpol Chanthala[2] and Toansakul Tony Santiboon[3]

[1] *Department of Curriculum and Instruction, Faculty of Education, Mahasarakham University, Mahasarakham, Thailand, E-mail: prasong.sa@msu.ac.th*
[2] *Physics Academician at the Institute for the Promotion of Teaching Science and Technology (IPST), Bangkok Thailand 10110, E-mail: chumpon603@gmail.com*
[3] *Research and Postdoctoral Administrator (18/106935)*
Queen's University Belfast, Northern Ireland, UK. Email: tsantiboon@yahoo.com
**Corresponding Author: - Prasong Saihong*

Abstract

The aims of this research study were to assess the Language and Cultural for Being Teacher (LCBT) classroom learning environment inventory, and to associate students' perceptions of their LCBT and their creative thinking abilities with a sample size consisting of 31 Master of Science Education students in Rajabhat Maha Sarakham University with purposive random sampling technique was selected. Students' perceptions of their LCBT class were assessed with the 25-item My Class Inventory (MCI), which contains five scales; each scale composes 5 items, namely; Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness scales. Students' responses to their creative thinking were assessed with the Creative Thinking Ability Questionnaire (CTAQ) in 24 items that contained four scales, namely; Originality, Flexibility, Fluency, and Elaboration. Statistically significant was analyzed with Cronbach Alpha reliability to check the quality of these instruments, and validation and reliability were assessed with Factor loading analysis and intercorrelation circumflex nature scales. Using mean scores of the MCI and CTAQ were associated between students' perceptions in LCBT class and enhancement of students' creative thinking with simple and multiple correlations, multiple regression, and determination efficient predictive value (R2) were analyzed. The results of these findings have found that: Two of the MCI and CTAQ are validated and reliable. Most of the items of the MCI and the CTAQ values are higher than 0.30 and omitted, significantly. Scale intercorrelation circumflex nature for the MCI and CTAQ are confirmed. Associations between of their Language and Cultural for Being Teacher classroom learning environment inventory and their creative thinking abilities in four scales were associated. The R2 value indicates that 33% of the variance in students' creative thinking abilities to their perceptions of their Language and Cultural for Being Teacher course toward learning environment inventory Rajabhat Maha Sarakham University, relatively.

KEYWORDS: Language and cultural for being teacher course, class inventory, enhancement, creative thinking abilities, graduate students, and Rajabhat Maha Sarakham University.

INTRODUCTION

In particular, educational personnel are highly qualified. All systems are managed effectively and in time to change including the application of appropriate technology to integrate with strengths in Thai society with the strategic goals of the Ministry of Education (Office of the National Economic and Social Development Board, 2017)[1]. Development Plan for Rajabhat Maha Sarakham University (RMU) and the strategic goals of the policy framework for the preparation of teachers and educational personnel to be able to effectively organize the education system in line with the changes. The curriculum for the production of science teachers is capable of knowledge, morality, ethics, and professional skills to lead the organization and bring knowledge to the education (Rajabhat Maha Sarakham University, 2017) [2]. Teacher development is the main factor in improving the quality of education in Thailand by the Faculty of Education. Rajabhat Mahasarakham University has a network of teacher development cooperation with ASEAN countries, which may be

co-sponsored by local agencies or educational institutions. Master of Science Educational students to be ethical, ethical and ethical in the academic and professional fields, using the science base of integrated education, between science, science and technology, to solve problems, to be able to have the ability to research and develop research results in science education to international standards, to be published transfer knowledge and skills the Thai and English versions of the research can be applied nationally or internationally. Encouraging students to become lifelong learners and develop the knowledge and ability in science education. Formal education system in the form of regular program, an extra program outside the official time, International Program in academic time or other forms as approved by the University (Rajabhat Maha Sarakham University, 2017)[2]. The curriculum is in accordance with the curriculum standards of the Ministry of Education and the Secretariat of the Teachers Council of Thailand. In terms of the Information and Communication Technology is the core course according to Rajabhat Maha Sarakham University's Announcement on Graduate Core Courses.

Although the effects of classroom and school environments are interdependent and cumulative has differentiated these settings in terms of their climates. Classroom climate obviously concerns the dynamics of classrooms or smaller learning environments, including how children feel and experience the characteristics of this milieu. Judgments as to the nature of the classroom climate are based on a student's perceptual consensus about the educational, psychological, social, and physical aspects of the environment (Santiboon, 2013)[3]. Because numerous measures of school and classroom climates have been developed over the past few decades, the My Class Inventory (MCI-SF) was narrowed to only those self-report surveys (Sink and Spencer, 2015)[4]. Although various instruments fit several of the criteria, only the My Class Inventory and its corresponding abbreviated version (MCISF) appear to meet each of them (Sink and Spencer, 2015)[4]. Scores on the MCI were analyzed by class to provide a measure (mean score) on each scale of each classroom of the classroom learning environment as perceived by the pupils to provide a measure of these pupils' perceptions of their classroom environments (Gedamu, 2017)[5]. At the bottom of the MCI are five abbreviations corresponding to the subscales (S = Satisfaction, F = Friction, Cm = Competitiveness, D = Difficulty, and Ch = Cohesiveness). To determine the Satisfaction subscale score, simply add the scores for the first statement in each block (i.e., Statements 1, 6, 11, 16, and 21); using the same process for determining scores on all five subscales. At this point, the teacher has the scores for each student. The final level of sophistication is to administer the MCI twice: once with students indicating how the classroom actually is, and then filling in a second sheet (Fisher and Fraser, 1981)[6].

In addition to the Creative Thinking Ability Questionnaire (CTAQ), historical of creative thinking, Guilford (1950)[7] was an early proponent of the idea that intelligence is not a unitary concept. Based on his interest in individual differences, he explored the multidimensional aspects of the human mind, describing the structure of the human intellect based on a number of different abilities. His work emphasized that scores on intelligence tests can not be taken as a unidimensional ranking that some researchers have argued indicate the superiority of some people, or groups of people, over others. In particular, Guilford showed that the most creative people may score lower on a standard IQ test due to their approach to the problems, which generates a larger number of possible solutions, some of which are original. Guilford's work, thus, allows for greater appreciation of the diversity of human thinking and abilities, without attributing different values to different people (Guilford, 1980). In this research study, an adapted version of Guilford's creative thinking skill test of his work on students' intelligence and creativity to the 24-item Guilford Divergent thinking Questionnaire (GDTQ) in 4 scales of fluency, flexibility, originality, and elaboration ability scales were used (Chanthala, Santiboon, and Ponkham, 2017)[8]. Using the 25-item My Class Inventory (MCI) (Santiboon, 2013[4] and the modified from the 24-item Guilford Divergent thinking Questionnaire (GDTQ) (Chanthala, Santiboon, and Ponkham, 2017)[8] to the 24-item Critical Thinking Ability Questionnaire (CTAQ) were assessed graduate students in Language and Culture for Being Teacher course in Graduate School, Rajabhat Maha Sarakham University in this research study.

METHODOLOGY AND MATERIALS

To investigate graduate students who needed help were allowed to ask questions, in some cases, the items were read to the students. Students reviewed all the respondents' inventories for accuracy, calculated subscale scores for each valid test, as well as assisted with data entry. Nearly all of the children required no more than 15 minutes to complete the inventory of their language and culture for being teacher class inventory for

enhancing the creative thinking abilities of graduate students at Rajabhat Maha Sarakham University.

Research Aims

1. To assess the Language and Cultural for Being Teacher (LCBT) classroom learning environment inventory for enhancing the creative thinking abilities of graduate students at Rajabhat Maha Sarakham University.
2. To associate graduate students' perceptions of their LCBT classroom learning inventory with the MCI questionnaire and their creative thinking abilities with the CTAQ questionnaire in the Master of Science Education Program at Rajabhat Maha Sarakham University

Sample Size

To administer a sample size consisting of 31 graduate students in the Master of Science Education Program at Rajabhat Maha Sarakham University with purposive random sampling technique was selected.

Research Instruments

The My Class Inventory (MCI)

In addition, rather than using the 25-item My Class Inventory (MCI) scale was modified to have five responses which are Almost Never, Seldom, Sometimes, Often, and Very Often which have scored 1, 2, 3, 4, and 5 respectively for positive items The condensed format with 25 items, asks respondents about their perceptions of five different dimensions of their LCBT environmental climates: Satisfaction (items 1, 2, 3, 4, 5), Friction (items 6, 7, 8, 9, 10), Competitiveness (items 11, 12, 13, 14, 15), Difficulty (items 16, 17, 18, 19, 20), and Cohesiveness (items 21, 22, 23, 24, 25). The underlying scale meanings might be best described as follows: Cohesiveness-the degree to which students understand, collaborate, and are friendly with one another; Friction--the extent of tension and conflict among students; Difficulty--the level of difficulty students have with the classroom work; Satisfaction--the extent to which students feel satisfied with or like their class; and Competition--the perceived amount of classroom competition.

The Creative Thinking Ability Questionnaire (CTAQ)

Using the 24-item Creative Thinking Ability Questionnaire (CTAQ) from the original version of the original of the Guilford's intelligence work; the Guilford Divergent Thinking Questionnaire was adapted to assess students' perceptions of their creative thinking abilities with the 24-item Guilford Creative Thinking Questionnaire (GCTQ) in 4 scales, namely Fluency Thinking (the ability to produce the great number of ideas or problem solutions in a short period of time); Flexibility Thinking (the ability to simultaneously propose a variety of approaches to a specific problem); Originality Thinking (the ability to produce new, original ideas); Elaboration Thinking (the ability to systematize and organize the details of an idea in a head and carry it out) was invented (Chanthala, Santiboon, and Ponkham, 2017)[8]. Each scale consists of 6 items and the five response alternatives are Almost Disagreement, Seldom Disagreement, Agreement, Often Agreement, and Most Agreement with each item's content.

Data Analysis

Assuming that the scaling of the items approximated a 5- point Likert scale, internal consistency reliabilities (alpha coefficients) were computed for each of the derived factors of the MCI forms and the CTAQ as specified. Factorial validity and adequacy of fit for the dimensionality of the MCI and the CTAQ were assessed through principal component analyses. The multiple correlations were significant of students' perceptions of their Language and Cultural for Being Teacher climate for the MCI with students' creative thinking abilities to associate were analyzed.

RESULTS

Validation and reliability of the MCI and the CTAQ

The results given in Table 1, 2, 3, and 4 shows that on an average item means for each of the five MCI and the four CTAQ scales, that they contain five items, so that the minimum and maximum score possible on each of these scales is 5 and 25, respectively. Because of this difference in the number of items in the five scales, the average item means for each scale was calculated so that there is a fair basis for comparison between different scales. These means were used as a basis for constructing the simplified plots of significant differences between forms of the MCI. The remaining five scales are Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness scales. There were significant differences between

students' perceptions of their LCBT climate, indicated to moderate; Factor Loading, Intercorrelation Circumplex Nature scales, and internal consistency (Cronbach alpha) reliability, respectively.

The MCI and the CTAQ forms were subjected to separated principal components factor analyses (with varimax rotation) involving student's scores. The factor structure that emerged replicated, to a large extent. Tables 1 and 2 list the items which were found to have factor loading greater than 0.30 (which is the minimum value conventionally accepted as meaningful in factor analysis).

Table 1 Factor Loading Analysis for the MCI

Item	Satisfaction	Friction	Competitiveness	Difficulty	Cohesiveness
Item 2	0.80				
Item 3	0.78				
Item 4	0.72				
Item 1	0.70				
Item 5	0.47				
Item 9		0.82			
Item 7		0.76			
Item 6		0.74			
Item 8		0.73			
Item 10		0.41			
Item 15			0.96		
Item 13			0.85		
Item 11			0.85		
Item 14			0.83		
Item 12			0.82		
Item 20				0.85	
Item 17				0.81	
Item 19				0.74	
Item 16				0.68	
Item 18				0.67	
Item 25					0.87
Item 21					0.74
Item 23					0.65
Item 22					0.58
Item 24					0.53
% of Variance	47.92	47.51	43.51	51.90	46.59
Eigenvalue	2.40	2.38	2.18	2.60	2.33

Loading smaller than 0.30 omitted. N=31

Table 2 Factor Loading Analysis for the CTAQ

Item	Originality	Flexibility	Fluency	Elaboration
Item 5	0.83			
Item 6	0.82			
Item 1	0.78			
Item 4	0.76			
Item 3	0.62			
Item 2	0.37			
Item 8		0.84		
Item 11		0.76		
Item 10		0.71		
Item 12		0.66		
Item 7		0.58		
Item 9		0.54		
Item 13			0.82	
Item 14			0.82	
Item 16			0.75	
Item 17			0.51	
Item 18			0.51	
Item 15			0.49	
Item 22				0.84
Item 20				0.83
Item 23				0.74
Item 21				0.61
Item 19				0.57
Item 24				0.52
% of Variance	29.69	29.05	45.21	46.75
Eigenvalue	1.78	1.74	2.71	2.81

Loading smaller than 0.30 omitted. N=31

On the whole, it appears that the items had factor loadings greater than 0.30 with their a priori scales, and hence, the results lend support to the factorial validity of the MCI and the CTAQ.

To investigate the Circumplex Nature of the MCI and the CTAQ, correlations between the scales were calculated. The results are presented in Tables 3 and 4.

Table 3 Scale Intercorrelation Circumplex Nature for the MCI

	Satisfaction	Friction	Competitiveness	Difficulty	Cohesiveness
Satisfaction		0.73***	0.74***	0.73***	0.77***
Friction			0.56***	0.67***	0.70***
Competitiveness				0.61***	0.61***
Difficulty					0.68***
Cohesiveness					

N=31, *ρ<.05, **ρ<.01, ***ρ<.001

Table 4 Scale Intercorrelation Circumplex Nature for the CTAQ

	Originality	Flexibility	Fluency	Elaboration
Originality		0.33*	0.30*	0.18
Flexibility			0.75***	0.60***
Fluency				0.69***
Elaboration				

N=31, *ρ<.05, **ρ<.01, ***ρ<.001

As expected, the results show that the correlation between a scale and the next scale, in general is high, and become lower for scales further away from that scale. This is illustrated using each scale in Tables 3 and 4. In general, the Circumplex Natures of the MCI and the CTAQ have been confirmed.

Internal consistency (Cronbach alpha coefficient) and the mean correlation of each scale with the other scales (Discrimination validity) were obtained from the sample in this present study as indices of scale reliability and discriminant validity for the MCI and the CTQA. The summary of these values obtained separately for the MCI and the CTAQ are reported in Tables 5 and 6.

Table 5 Mean, Average Mean, Standard Deviation, Variance, Cronbach Alpha Reliability, Discrimination, and F-test for the MCI

Scale	Mean	Average Mean	Standard Deviation	Variance	α-Reliability	Discriminant	F-test
Satisfaction	21.63	4.33	2.58	6.65	0.68	0.69	6.43**
Friction	22.73	4.55	2.56	6.55	0.72	0.69	2.98*
Competitiveness	22.10	4.42	2.29	5.27	0.65	0.71	12.00**
Difficulty	22.33	4.47	2.31	5.33	0.74	0.68	12.31**
Cohesiveness	22.53	4.51	2.19	4.81	0.68	0.69	10.36**

N=31, *ρ<.05, **ρ<.01, ***ρ<.001

Table 6 Mean, Average Mean, Standard Deviation, Variance, Cronbach Alpha Reliability, Discrimination, and F-test for the CTAQ

Scale	Mean	Average Mean	Standard Deviation	Variance	α-Reliability	Discriminant	F-test
Originality	21.87	3.64	2.92	8.53	0.62	0.73	3.08*
Flexibility	22.80	3.80	2.91	8.44	0.68	0.71	1.02
Fluency	22.17	3.69	3.75	14.08	0.76	0.69	1.06
Elaboration	22.37	3.73	3.39	11.48	0.76	0.69	2.52*
Total	22.30	3.72	10.25	104.99	0.84		1.81*

N=31, *ρ<.05, **ρ<.01, ***ρ<.001

As reported in Tables 5 and 6, the reliability coefficients for the different MCI ranged from 0.65 to 0.74 and ranged from 0.62 to 0.76 for the CTAQ when using the individual student as the unit of analysis. On the whole, these results are acceptable although somewhat lower than those obtained previously validation sample (Fisher and Fraser, 1981)[6]; Santiboon, 2013[4]., Chanthala, Santiboon, and Ponkham, 2017[8]).

In Tables 5 and 6 the scale means ranged from 4.33 to 4.55 on the MCI Form, and from 3.64 to 3.80 for the CTAQ Form. Standard deviations for the MCI Form ranged from 2.19 on the Cohesiveness scale to 2.58 on the Satisfaction scale, whereas on the CTAQ Form, standard deviations ranged from 2.91 on the Flexibility scale to 3.75 on the Fluency scale. Tables 5 and 6 reveal that the MCI and the CTAQ scales were statically significant at the 0.05 level overall on the MCI and the CTAQ scales.

Associations between Graduate Students' Perceptions of their LCBT Classroom Learning Inventory with the MCI Questionnaire and their Creative Thinking Abilities (CTAQ)

The simple correlation values (r) are reported in Table 7 which show significant correlations ($p<0.05$) between students' creative thinking outcomes and my school climate on all five scales. These associations are positive for the scales of Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness; there was a more favourable attitude towards their LCBT environment climates. The second type of analysis consisted of the more conservative standardized regression coefficient (β) which measures the association between students' perceptions on each scale of the MCI and their creative thinking abilities towards their LCBT climate when the effect of relationships between the scales is controlled.

Table 7 Associations between Graduate Students' Perceptions of their LCBT Classroom Learning Inventory with the MCI and their Creative Thinking Abilities (CTAQ)

Scale	Simple Correlation (r)	Standardized Regression Weight Validity (β)
Satisfaction	0.55**	0.17*
Friction	0.54**	0.29**
Competitiveness	0.41*	0.33**
Difficulty	0.45*	0.20*
Cohesiveness	0.50**	0.23**
Multiple Correlation (R)	0.5761*	
Determination Efficient Predictive Value (R^2)	0.3319*	

N=31, *ρ<.05, **ρ<.01, ***ρ<.001

The multiple correlation R is significant for the LCBT Climate Form of the MCI and shows that when the scales are considered together there is a significant ($\rho<0.05$) association with the CTAQ. The R^2 value indicates that 33% of the variance in students' creative thinking abilities to their LCBT classroom environment inventory was attributable to their perceptions of their LCBT climates. The beta weights (β) show that the LCBT classroom environment inventory perceived greater Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness in their LCBT classroom environment inventory, and there was a more favorable attitude towards their LCBT classroom environment inventory.

CONCLUSIONS AND DISCUSSIONS

To investigate of the Language and Cultural for Being Teacher class inventory for enhancing the creative thinking abilities of graduate students at Rajabhat Maha Sarakham University were examined. The purposes of this study were to examine the impact of assessing the Cultural for Being Teacher class in obtaining information about student's perception of their Cultural for Being Teacher environmental climate. The instrument used to assess in student perception of the My Class Inventory (MCI) was the short form. Using the Creative thinking Ability Questionnaire (CTAQ) was associated. The study sampled 31 graduate students from the Master of Science Education Program, Faculty of Education, Rajabhat Maha Sarakham University, Thailand. Although this study resulted, appropriate statistical procedures were used in order to follow the two research aims, regarding the validation of the questionnaires. The procedures included Cronbach alpha coefficient, factor loading analysis, intercorrelation circumflex nature validity, discriminate validity, simple and multiple correlations, multiple regression, and determination of efficient predictive value were assessed. The two instruments, namely, the MCI, and the CTAQ, are valid and reliable to provide meaningful information ranging from 0.65 to 0.74 and ranged from 0.62 to 0.76 for the CTAQ when using the individual student as the unit of analysis. LCBT classroom environment inventory has investigated the association between students' creative thinking abilities of their perceptions of their LCBT classroom environment inventory were assessed. Further study is necessary to determine how effective improvement strategies are in reducing discrepancies between LCBT classroom environment inventory and the impact of these reductions on the achievement of LCBT classroom environment goals.

In an attempt to recommend to primary school climates a reliable and valid instrument to measure classroom climate within the context of MCI, followed as the authors psychometrically reexamined Fraser's (Sink and Spencer, 2015)[4], 25-item MCI-SF using a sample of nearly 3,000 elementary and university students from a large and ethnically diverse urban school district in Washington state. The five-dimension model suggested by Fraser yielded an inadequate representation of the data to moderate coefficient alphas for each of the five scales were found as well. The researchers based on the previously

discussed statistical analyses modified Fraser's original inventory in an attempt to produce a more viable measure as the same as Thailand's school climate for this study. As a result, reliability coefficients for each scale, with the same scoring and administration procedures as the original MCI-SF, the Satisfaction, Friction, Competitiveness, Difficulty, and Cohesiveness scales from the revised MCI are useful as an accountability tool for school climate in Thailand. Although cultural differences among the Australian and American students exist, the stronger coefficient alphas for primary students could be due to cognitive-developmental differences among samples in Thailand (Santiboon, 2013)[3].

In previous research used as criterion variables in prior curriculum evaluation research, student perceptions of classroom environment characteristics have differentiated revealingly, usefully, and appreciably between classrooms following alternative curriculum materials or instructional strategies (Anderson, Walberg, and Welch, 1969[9]). In addition, other studies have established the criterion validity of classroom environment perceptions in differentiating between classrooms varying in the grade level (Lederman and Abell, 2014)[10], class size (Mariani, Villares, Sink, and Kuba, 2015), and subject matter, and between classrooms in five different types of schools. The strongest tradition in past research on classroom learning environment, however, has involved the investigation of the predictive validity of student perceptions (i.e., the ability to predict student cognitive, affective, and behavioral learning outcomes) (Aldridge and Galos, 2017).

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REFERENCES

[1]. Office of the National Economic and Social Development Board, Office of the Prime Minister (2017). The Twelfth National Economic and Social Development Plan (2017-2021). Bangkok, Thailand. Retrieved from http://www.nesdb.go.th/nesdb_en/ewt_w3c/ewt_dl_link.php?nid=4345

[2]. Rajabhat Maha Sarakham University. (2017). Vision and organization of RMU. Retrieved from https://www.rmu.ac.th/

[3]. Santiboon, T. (2013). School environments inventory in primary education in Thailand. Merit Research Journal of Education and Review (ISSN: 2350-2282) Vol. 1(10) pp. 250-258, November, 2013

[4]. Sink, C. A., and Spencer, L. R. (2015). My class inventory-short form as an accountability tool for elementary school counselors to measure classroom climate. American School Counselor Association, Vol 2(5): pp. 245-256.

[5]. Gedamu, A. D. (2017). Association between students' perceived EFL classroom environment and their achievement in English language: Ethiopian Secondary Schools in context**.** International Journal of Languages' Education and Teaching Volume 5, Issue 3, September 2017: pp. 1-11.

[6]. Fisher, D. L. and Fraser, B. J. (1981). Validity and use of My Class Inventory. Science Education, 65: pp. 140–156.

[7]. Guilford, J. P. (1950). Creativity. American Psychologist, 5: pp. 444–454.

[8]. Chanthala, C., Santiboon, T. and Ponkham, K. (2017). Affecting the activity-based on learning approaching management through the STEM education instructional method for fostering the creative thinking abilities, learning achievements and environmental perceptions in physics laboratory classes of secondary students at the 10th grade level. European Journal of Education Studies, Volume 3, Issue 5, 2017: pp. 94-121.

[9]. Walberg, H. J., Anderson, G. J., and Welch, W. W. (1969). Classroom climate and individual learning. Journal of Educational Psychology, 59(6, Pt.1): pp. 414-419.

[10]. Lederman, N, G., and Abell, S. K. (2014). Research on My Class Inventory (MCI). Handbook of Research on Science Education, Vol. 2. Retrieved from https://books.google.co.th/books?id=-9wABAAAQBAJ&pg=PA107&lpg=PA107&dq=Research+on+My+Class+Inventory+(MCI)

[11]. Mariani, M., Villares, E., Sink, C. A., and Kuba, S. P. (2015). Confirming the structural

validity of the My Class Inventory-short form revised. ResearchGate. November 2015.
[12]. Aldridge, J. M., and Galos, S. (2017). Development and validation of an instrument to assess primary school students' perceptions of the learning environment. ResearchGate. September 2017.