An Investigation into the Factors Affecting Student Creativity in Higher Education in Thailand

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Abstract

The main purpose of this study is to investigate factors affecting learner creativity in higher education in Thailand. The paper examines some of the issues with educational policy since the introduction of the pivotal National Education Act Thailand 1999, which emphasized the need for learners to develop their creative abilities in order to succeed in an ever-changing global environment. Final-year undergraduate students at four universities in Thailand were surveyed by means of a Likert question-naire and results were examined through SPSS analysis (Statistical Package for the Social Sciences) using Dunnett's T3 test for correlational factors. Results from this exploratory study indicate that, while students are, in general terms, positive about the opportunities for creativity, the Thai government needs to do more to encourage creativity in education.The paper concludes with specific recommendations for policy makers and classroom practice.

Keywords: National Education Act Thailand, Thai learners, creativity, Thai cultural norms

Background

The promulgation of the National Education Act (NEA) of 1999 in Thailand (National Education Act of B.E. 2542 (1999), Office of the National Education Commission, Office of the Prime Minister, Thailand) was a response to what was perceived as a continuous decline in the country's international competitiveness (Sangnapaboworn, 2003), a view heavily influenced by the impact of the Asian financial crisis of 1997.[1] Sweeping reforms were proposed to all areas and levels of education. In particular, learning reform, with the goal of enabling learners to be creative, to develop and express themselves at their own pace and to the best of their potential, was seen as central to education reform (Sangnapaboworn, 2003). The NEA was seen as a watershed in providing a road map for higher education reform in Thailand, whose philosophy has underpinned the framework of subsequent educational policies.

Nevertheless, as early as 2001, it was noted that the lack of coordination among ministries and departments was becoming an obstacle to implementing NEA reforms (Atagi, 2002). Subsequently, the diversification of policies led to the "differentiation of standards in various aspects among higher education institutions" (Sangnapaboworn, 2003: 2). In Higher Education, the Education Reform Steering Committee established various 'task forces' in order to provide roadmaps for strategy and policy. Key strategies were outlined, including the reform of teaching and learning, aimed at enabling learners to develop appropriate skills to harness creativity and innovation, through curriculum reform and teaching pedagogy. Several projects to promote the "cultivation of students' intellectual creativity" (Sangnapaboworn, 2003: 10) were launched by the Higher Education Commission. By 2004, a policy paper by the Ministry of Education deemed it as 'critical' that Thailand become more involved in innovation in education (National Report 2004, Ministry of Education, Thailand). Since 2005, educational policies have centered on promoting modern thinking and creativity in Thai learners (Pimpa, 2012).

Such reforms and strategies have been hampered, however, by continuing political uncertainty and turmoil, which has led to a high turnover of education ministers and their individual policy agendas. For example, political unrest in 2013 and early 2014 resulted in a caretaker government for an extended period, with all ministerial works and projects effectively suspended. Other factors have also contributed to what is generally acknowledged as a decline in higher education standards. These include low pay and poor working conditions for teachers (Sangnapaboworn, 2003), the poor quality of human resources (Pimpa, 2011) and the top-down nature of strategy re-

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[1] In the currency crisis of 1997, the Thai baht suffered a catastrophic devaluation against the US dollar.

form (Hallinger & Moosung, 2011).Bureaucracy is highly centralized (Fry, 2002) and most higher education institutions and international schools are clustered around the Bangkok metropolitan area. To a significant extent, the problem lies not with lack of policies but with excess: this could well be because Thai policy-makers have tended to view the main obstacles to education reform as "structural and political (e.g. forming new organizational and legal frameworks) sic rather than socio-cultural" (Hallinger & Bryant, 2013: 3). Subsequently, although the Ministry of Education (MOE) has recognized the importance of reform in teaching, little has been done to consult or support those on the frontline of education or provide them with adequate training.

Lack of financial support has not been the problem, however. Although successive governments have doubled the budget on education since 2002, there has not been a corresponding improvement in the level and quality of education provided, both in absolute terms and relative to other countries (Economist, 2012). Only one Thai university, King Mongkut's University of Technology in Thonburi, was listed in the top 400 universities ranked by The Times Higher Education World University Rankings 2012-2013. Thailand consistently performs poorly in educational rankings: a global index ranking by Pearson Publishing UK placed Thailand 37 out of 40 countries assessed for cognitive skills and educational attainment (Pearson, 2012), and it ranked 55 out of 60 countries assessed for English proficiency (English Proficiency Index, 2013).

Emphasis on the value of innovation and creativity in education is a relatively new concept in Thai society (Pimpa, 2011). Although the NEA 1999 highlighted the importance of creativity and self-development in education, no clear roadmap was provided on how these concepts would be promoted. Similarly, a 160-page report on national educational development in 2003 by the ThaiOffice of the National Education Commission (ONEC), did not broach the issue of creativity; in fact, the word 'creativity' appeared only once, in reference to the theme for the Seventh Asia-Pacific conference in 2002.

The nature of creativity

The position of creativity as a key concept at the heart of educational reform in Thailand (Rojanapanich & Pimpa, 2011) is a reflection of the importance assigned to it by educational institutions worldwide. This emphasis on creativity is driven primarily by the need to develop knowledge-based, creative economies (Craft, 2001; McGoldrick, 2002; Seltzer & Bentley, 1999; Sternberg, 1998), as countries increasingly seek to move up the value chain. Despite creativity's position as a central plank of educational

policy internationally, the term itself is vague and unclear (Negus & Pickering, 2004) and Craft has highlighted the paradox in attempting to define something whose very nature would imply resistance to such confinement (Craft, 2003). Disagreement in the literature on the exact nature of creativity has been highlighted by Kampylis and Valtanen, who identified over 42 explicit definitions of creativity from ten key studies on the subject (Kampylis & Valtanen, 2010). Although it has been suggested that no simple characterization of creativity is possible (Maitland, 1976), we can find broad consensus in the literature on some common characteristics which are clearly prerequisites for creativity; principally the elements of *newness, individuality* and *usefulness,* (whether to the individual or society) (Averill, 1999; Craft, 2003; Csikszentmihalyi, 1997; Poincaré, 1970; Runco, 2008). Learning in itself is a creative act (Power, 2012). Yet, students often comment that education teaches them knowledge, but never teaches them how to learn (Bentley, 2000). Therefore, in the every-day educational and classroom context, creativity should be seen more as a process than a single event or outcome. It is a consistent application of behaviors towards overcoming obstacles and an increased awareness of the effectiveness of those behaviors. Learners,therefore, need to be guided towards increasingly more conscious creative behaviors. Creative people have the confidence to be individual, different and express themselves.

The key here is to recognize and foster what allows creativity, rather than seeking a precise definition. We are all creative, and indeed, creativity permeates our everyday actions (Duch, 2007). But these talents are often buried deep (Robinson, 2010), and the challenge for educational institutions is to provide appropriate environments and skills for learners to discover and maximize their creative potential.

Thai cultural norms and creativity

A large body of literature and research has shown that socio-cultural factors have a significant impact on learner creativity (Albert & Runco, 1999; Csikszentmihalyi, 1997; Dacey & Lennon, 2000; Hennessey & Amabile, 1998; Robinson, 2006; Ryhammar & Brolin, 1999). In Thailand, a number of cultural norms have traditionally been seen as barriers to Thai learners' abilities to be creative. Earlier studies suggested that factors such as the collective nature of Thai society, the effects of high-power distance relationships (Hofstede, 1991), and the strong connections to traditional ways of thinking (Mulder, 1996) have limited the imaginative capacity of Thai people. The sense of being Thai stems, to a large extent, from a strong Buddhist culture, with respect for elders and those in authority (Rojanapanich & Pimpa, 2011), expressed in the concept of *kwamkreng jai,* or respect and deference to others. This strong respect

for authority and the virtue of obeying parents and teachers is seen as a key factor affecting creativity (Rojanapanich & Pimpa, 2011; Thanasankit, 2002), and,perhaps as a result, Thai students are often described as being passive (Deveney, 2005). In particular, rote-learning in schools, which is still prevalent (especially in the provinces), is considered by many to be a key obstruction to creative thinking. Overall, the individual is subsumed in the collective, with the aim of doing the best according to a group standard,without standing out (Pimpa, 2012), resulting in reluctance to express ideas or be different. The most important issue is that of losing 'face', whereby a 'wrong' answer to a question will result in a student looking foolish. Thai teachers themselves may feel threatened in this way if they are asked difficult and challenging questions. Pimpa goes as far as to suggest that the ultimate goal of Thai organizations is to "control everything in order to eliminate or avoid the unexpected" (Pimpa, 2012: 37).

The view that Thai cultural norms are resistant to change regardless of the extent of political and economic upheaval (Hallinger, Chantarapanya, Sriboonma & Kantamara, 2000) is open to question, however. The understanding about the relationship between these factors and creativity in Thailand is unclear, and creativity among Thai students has been as much affected by the whirlwind of technological innovation and globalization as young people elsewhere (Rojanapanich & Pimpa, 2011). The educational landscape has been rapidly changing, with an increasing focus on internationalization. At the turn of the century there were 58 international schools registered in Thailand (Fry, 2002). By 2014, there were over 100 international schools registered with the International Schools Association of Thailand (ISAT, 2014), and there is every indication that this upward trend will continue. This, in turn, has led to the increase in recruitment of non-Thai teachers, or 'farangs' (foreigners), with more schools becoming 'bilingual' and incorporating western curricula and pedagogy. Prestigious colleges such as Mahidol, Chulalongkorn, Kasetsart, Thammasat and Chiang Mai, have well-established international programs serving Thai, regional and international students (Tomita, Srivatananuklkit & Fry, 2002). The upcoming economic integration of South East Asian countries under ASEAN in 2015 has been high on the agenda in all areas of education, leading to widespread recognition of the need to instill creativity and innovation in learning, in order to maintain the nation's competitive edge. Nevertheless, as we have seen, these changes have to date done little to improve Thailand's overall educational ranking, and the extent to which they affect Thai learners' creativity is unknown. It is against this backdrop of a variety of seemingly contradictory factors then, that the research was conducted.

Purposes of the Study

We have established that little attention has been given in Thai educational policy to fostering creativity despite successive governments' realization of its importance in promoting strategy objectives of innovation and lifelong learning. The individual and expressive nature of creativity could be seen as at odds with Thai cultural values. We have already observed that policy implementation may be hampered by sociocultural rather than structural obstacles (Hallinger & Bryant, 2013). This can result in a cultural disposition to implicitly defer to those who are more senior in rank (Hofstede, 1991). These factors, coupled with a lack of clearly defined roadmaps and possible 'reform fatigue' (Hallinger & Bryant, 2013), have contributed to the relative slow progress of the impact of these reforms on teachers and students.

Given these factors, and the background to the issues with creativity outlined above, I considered it salient to explore the current situation with Thai university students. What would emerge as the key narrative for examination in future, more detailed investigations? By canvassing the opinions of learners at universities from different regions of Thailand, I hoped to provide some insights into the extent in which the numerous policy initiatives stemming from the NEA had contributed to the promotion and development of creativity at university level. To a significant degree, such 'on the ground' feedback on the effects of Thai educational reform on creativity is lacking.

Methodology and Procedure

The methodology and procedure can be divided into four main stages. In the first stage, a heuristic approach was initially used to determine the items to be included in the questionnaire. At the English language program in the university where I teach, all undergraduate students on their first day of a new semester are required to provide writing samples for purposes of comparison at later stages of the course, with teachers free to select the topic. Over a period of four semesters, students in four of my classes at different levels wrote essays on the theme of creativity in Thailand. This fitted in with the theme of each particular course. In total, over 90 essays were collected. These samples were then analyzed by three experienced colleagues to determine the original Likert questionnaire items. In stage one, these data were supplemented by feedback and input from three focus groups with final-year undergraduate students in stage two. These focus groups were instrumental in developing the narrative of the question items, by tracing the influence of creativity from parents through university education.

In stage three, a pilot was trialed with over 50 students over a period of three months and subsequent adjustments were made.

Stage four involved preparation of ethics approval documents. Appropriate ethics clearance and participant consent forms were prepared according to university guidelines and were approved by the university's Ethics Committee. A number of institutions across Thailand were invited to participate in the study. Constraints of time and administration, coupled with lack of response from some institutions, contributed to the final selection of four universities. One is a public university in central Bangkok, one a private international college university in the suburban area of Bangkok, and two are public universities in the provinces (one in the north and one in the east of Thailand.) During the fifth and final stage, data were collected from the four universities between January and August 2013. I visited three of the institutions in person to conduct the survey.

The process of data collection varied depending on the university: in one university, I was able to collect the data within one day, by visiting classes either before or after lectures; in another, a succession of visits was required over a period of a week, as the participants in each group sometimes numbered as little as five, and my 'ideal' target was 100 participants from each institution. In every case I was ably assisted by administration and faculty staff who went out of their way to accommodate my needs. An added (and unforeseen) benefit of this approach was the opportunity to clarify any student queries, and in some cases the possibility of discussing the issue of creativity, informally, with a range of students. Due to strict ethics and administration procedures at the fourth university, the questionnaires were delivered and distributed by the university staff, and later collected. Results were examined through SPSS analysis, using Dunnett's T3 test for correlational factors. Around 50 percent of the questionnaires were in Thai and responses from these were translated into English.

Participants

The target group was undergraduate students in their final year at college, irrespective of their majors. All participating universities kindly complied with this request by identifying relevant student samples and liaising with the researcher on timetables and schedules when these students would be available. It was felt that these students would be able to draw on significant experience as they approached (for some, at least) the end of their journey through the Thai education system. A total of 391 students participated in the questionnaire, of which 57 percent were female and 47 percent were male. The distribution of participants from each institution ranged from 19 percent to 32 percent.

Results summary

The results in Table 1 show that participants strongly agreed that the Thai government should do more to support creativity in education ($\bar{x}$ = 4.32, SD = 4) and technology, such as the internet, was a key factor ($\bar{x}$ = 4.02, SD = 0.81) in allowing them to be creative. The statement *my parents encourage me to express myself* elicited the highest percentage of 'agree' response (60.61 percent, $\bar{x}$ = 3.98, SD=0.78). Although 30 percent of students agreed that being Thai prevented them from expressing themselves individually ($\bar{x}$ = 3.09, SD = 1.08), almost 26 percent disagreed, with over 6 percent strongly disagreeing. Less than 50 percent felt positively that their teachers at high school encouraged them to be individual and different ($\bar{x}$ = 3.31, SD = 0.90), although participants were significantly more in agreement that their university teachers encouraged them to be individual and different ($\bar{x}$ = 3.73, SD = 0.86). Just under 50 percent considered themselves creative, with 7 percent strongly agreeing ($\bar{x}$ = 3.53, SD = 0.77). Over 75 percent were in agreement that their university should do more to support creativity in education ($\bar{x}$ = 3.96, SD = 0.79). Finally, responses to statements where selection of 'agree' or 'strongly agree' indicated a positive position (1,2,3,4,5,6 and 10), demonstrated that 67 percent of students were positive overall about the encouragement and opportunities they had to be creative.

Table 1 Results summary (N = 391)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Mean ($\overline{x}$)	S.D.
1. My parents encourage me to express myself and be individual	1.28%	3.84%	12.53%	60.61%	21.74%	3.98	0.78
2. My educational background has taught me to think out-of-the-box	2.56%	13.30%	25.58%	49.36%	9.21%	3.49	0.93
3. My teachers at high school encouraged me to be individual and different	1.79%	17.90%	34.02%	40.15%	6.14%	3.31	0.90
4. My teachers at university encourage me to be individual and different	1.53%	8.44%	19.44%	56.52%	14.07%	3.73	0.86
5. My courses at university allow me to develop my creative abilities	1.28%	8.95%	14.32%	59.08%	16.37%	3.80	0.86
6. My university needs to do more to develop creative thinking and expression	0.51%	3.32%	19.95%	52.43%	23.79%	3.96	0.79
7. The government should do more to support creativity in education	1.02%	3.07%	10.23%	34.02%	51.66%	4.32	4
8. Being Thai prevents me from expressing myself more individually	6.39%	25.83%	28.90%	29.92%	8.95%	3.09	1.08
9. Access to technology, such as the internet, allows me to be more creative	0.77%	5.12%	12.02%	55.50%	26.60%	4.02	0.81
10 I consider myself a creative person	1.28%	6.65%	36.57%	48.59%	6.91%	3.53	0.77

Correlation in parental income

Parents' estimated income was divided into four categories: 10,000-25,000 baht;* 25,000-50,000 baht; 50,000-100,000 baht and 100,000 baht and above. As a point of reference, the salary range from 25,000-100,000 is considered the lower-to-upper middle class income range. The lowest income range (10,000-25,000 baht) had the least representation in the sample (21 percent) while the 25,000-50,000 baht range had the highest representation at almost 30 percent. Analysis showed that parental income was a significant factor in student responses to three questions: *My teachers at high school encouraged me to be individual and different* (p=.038); *the government should do more to support creativity in education* (p=.024); and *Being Thai prevents me from expressing myself individually* (p=.011). Students whose parents earned between 50,000-100,000 baht (considered to be a middle-class upwards income bracket) were more in agreement that their teachers at high school encouraged them to be different than those from income brackets under 50,000 (p=.010).Students with parents' estimated income (100,000 baht-above, 50,000-100,000 bath and 25,000-50,000 bath) strongly agreed that the government should do more to support creativity in education , while those within the lowest income bracket (10,000-25,000 baht) agreed, but not strongly (p=.024). Those from parental backgrounds with income between 25,000-50,000 baht agree the most that being Thai prevents them from expressing themselves individually, whereas those with incomes of 100,000 and above agree the least (p=.005, see Table 3 below).

*Baht is the Thai currency (1 US dollar = approx. 30 Thai baht)

Table 2 Being Thai prevents me from expressing myself more individually, according to parental income (in Thai baht)

Parentalincome (Est.)	Level	Mean	1	2	3	4
25,000-50,000	1	3.08	-	.976	.055	.005*
10,000-25,000	2	3.08		-	.072	.008*
50,000-100,000	3	2.80			-	.329
100,000-above	4	2.65				-

* Significance at p-value <0.05

Correlation between different high school backgrounds

Students' high school background was divided into four categories: International schools in Thailand, schools outside Thailand, government schools (in Thailand) and other. The majority of participants (74 percent) were from government schools, with just over 10 percent from international schools, 7 percent from schools outside Thailand and the remainder from other, unidentified school backgrounds. A number of variables were found to be statistically significant ($p=<.05$), and there was a significant difference overall between responses from students from international schools in Thailand and those from government schools. For example, those from international schools in Thailand were more in agreement with the statements *my educational background has taught me to think out-of-the-box* ($p=.001$) and my teachers at high school encouraged me to be individual and different ($p=.003$),than those from government schools. However, students from government schools felt more strongly that their universities needed to do more to develop creative thinking and expressionthan those from international schools ($p=.037$), while participants from schools outside Thailand felt most strongly that the government should do more to support creativity in education than those from government schools ($p=.035$). Students from international schools and schools outside Thailand were more in agreement that being Thai prevented them from being creative than those from government schools ($p=.002$ and $p=.014$ respectively).

Table 3 Variable scores according to high school background

Background	Level	Mean	1	2	3	4
International school Thailand	1	3.38	-	.558	.064	.010*
School outside Thailand	2	3.33		-	.275	.161
Other	3	3.23			-	.998
Government school	4	3.23				-

* Significance at p-value <0.05

Correlation between different university backgrounds

In total, seven of the ten question items showed a correlation (Sig.<0.05) between the different universities. Overall, students from the international college in the capital city, Bangkok, had a more positive response to many of the items in the questionnaire. For example, respondents from the international college were more in agreement that their educational background had taught them to think out-of-the-box (p=.012), compared to those from the provincial universities. Similarly, they agreed more strongly that their university teachers encouraged them to be individual and different (p=.001), compared to the university in central Bangkok, and p=.015 to one of those in the provinces. In response to the question: *My courses at university allow me to develop my creative abilities,* students from three of the universities responded positively, with only the university in central Bangkok neither agreeing nor disagreeing. In contrast, respondents from both provincial universities felt more strongly that being Thai prevented them from expressing themselves more individually. International college students were more in agreement that technology allowed them to be more creative, compared to their counterparts in the Western province (p=.019) and the university in central Bangkok (p=.015). Both the university from central Bangkok and international college in the suburbs agreed that being Thai prevented them from expressing themselves more individually, as opposed to the two universities in the provinces which were neutral (p=.001).

Table 4 Shows the different responses to the statement: *My teachers at university encourage me to be individual and different in relation to university background*

University	Level	Mean	1	2	3	4
Private international Suburb Bkk*	1	3.97	-	.730	.015*	< .001**
Public east	2	3.85		-	-	< .001**
Public north	3	3.61				.098
Public Bkk	4	3.25				-

* Bkk=Bangkok

** Significance at p-value <0.05

Additional student comments

The questionnaire encouraged students to write additional comments on their views of creativity. A selection of relevant points is presented in Table 5. These comments mainly focus on the extent in which Thai culture and teaching styles are seen as impacting on creative development. It should be made clear that these remarks, although revealing, represent a small sample of the overall population. Informal discussions with students during my visit to the universities provided more nuanced responses to those listed here. A common theme in these conversations was recognition of efforts by faculty and staff to improve the environment for creativity. One student praised the layout of the new library, with its creative pods or meeting spaces seen as an example of efforts to encourage creativity. Another suggested that the large class sizes (almost 40 students) made it difficult for lecturers to encourage debate and expression.

Table 5 Additional student comments *(language errors as written)*

- University instructors doesn't foster student to be themselves. This is because when students express their opinion or answer a question wrongly, the instructor as of result, use aggressive or abusive verbal.
- I think some of the instructor should change their teaching style to one where there are discussion and exchange of opinions instead of restricting student opinions.
- University teacher who allow for discussions among students will help students understand whether their thought process is logical or illogical. This also gives student more opportunity to learn and be creative.
- Thai Culture has a negative aspect to student or people at a younger age expressing their opinions and ideas. The older generations often associate this with being rude and unmannered. This puts pressure and border on children in being themselves and expressing their thoughts. These obstacles in Thai culture also cause children to lack creativity.
- Creativity is limited in terms of education, social, culture, and individual. This limitation is influenced by traditional Thai culture and conformity. People are not willing to except creativity or new ideas.
- Creativity and expressing ones idea are all very positive, but only if it's done in a good way
- I think I am creative, but I am not sure in what way

Discussion

What does this survey tell us about the factors affecting Thai students' creativity in higher education? First of all, given the obstacles to fostering creativity in Thailand outlined in the literature, the findings are surprisingly positive overall about how learners feel encouraged to be creative and express themselves. In particular, a significant majority of students felt that parents encouraged them in self-expression and individuality, which would seem to run counter to the perceived wisdom of reverence and obedience for elders and the culture of collectivism as opposed to individualism. Some additional observations on this theme emerged during the focus group sessions. One particular group contained a number of students who were planning to eventually run their family businesses. Discussions centered on the following apparent contradiction:Parents wanted students to develop their creativity at university in order to ensure the future success of their respective businesses; at the same time they were expected to conform totheir parents' wishes for them to follow in their footsteps.

Being Thai was considered a hindrance to creativity by less than 40 percent, with over 30 percent disagreeing, suggesting that, for some learners, being Thai does not necessarily mean being subject to Thai cultural norms. Or perhaps Thai norms are less mono-cultural than those represented in the literature. In terms of parental income, students from lower middle class income backgrounds tended to feel most strongly that being Thai was a hindrance to their individual expression. Educational background does matter when it comes to creativity, according to the study. Students from international school backgrounds were considerably more positive about their educational backgrounds, allowing them to think out-of-the-box and also that their teachers encouraged individual expression and development. In general, all students were more positive about their university teachers and university courses in relation to creative encouragement, as opposed to high school. It suggests that the academic environment in university is more receptive to fostering creativity, or possibly that learners' college experiences were fresher in their minds. The fact that students came from a wide variety of high school backgrounds, compared to the number of universities in the study, may have also been a factor in responses to creativity in high school (it is worth noting here that in Thailand the term 'international' is loosely applied to high schools of differing standards and curricula). Less positively, little more than half of the participants considered themselves creative, and additional comments raised by learners focused heavily on the restrictive nature of Thai culture and teaching styles in fostering creative environments. Some focus group participants suggested that the heavy workload and pressure to get a good grade meant that they were reluctant to take creative risks.

Strong agreement that the government and universities need to do more to foster creativity is not surprising, given the lack of direction in Thai educational policy and implementation, although it could be argued that these sentiments are probably echoed by university students in many other countries. While most of the most prestigious educational establishments cluster around Bangkok-almost 50 percent -there was not as marked a difference in responses as expected, although students from the universities outside Bangkok felt more strongly that being Thai prevented them from being creative. Technology is overwhelmingly seen as being positive in helping creativity.

Implications for policy makers

Results from this study suggest that three areas in particular need attention from Thai educational policy makers: the government should do more to support creativity in education; universities need to do more to develop creative thinking and expression; and more can be done to teach students to think out-of-the-box.

First and foremost, creativity must be seen as central to the NEA 1999's promotion of life-long learning. Policy formulation should spell out key strategies that specifically target the promotion of creativity and critical thinking. Formulation of these policies should begin through consultation with those on the frontline of education, taking into account the everyday contexts in which teachers find themselves. Experts on creative development, both national and international, should be involved in all stages of the process. Execution of these strategies needs to be in the form of adequate training for teachers, and focus on the practical implementation of policy.

Curriculum assessment criteria should acknowledge the learner behaviors which foster creativity, such as curiosity, perseverance, goal-setting and reflection. Funding of projects to foster creativity should be targeted towards early years where educational support makes most difference (Bentley, 2000) and where learner habits are most susceptible to absorbing best practice. Teachers need to be allowed the flexibility to adapt these initiatives according to the rapidly changing nature of learners'needs. Similarly, policy must allow for flexibility of implementation in order to accommodate the different needs and skills sets of local schools. The pivotal role of the family in fostering learner development needs to be recognized by increasing parental involvement in school policy and decision-making. At the university level, more ways to involve students with their learning, such as 'open plan' syllabi, where students are consulted in curriculum development and materials, and which offer students direct creative input,should be explored.For example, in the Student As Producer project at

Lincoln university in the UK, undergraduate students work alongside staff in the design and delivery of their teaching and learning programs (Lincoln University, 2014).

These criticisms should not mask the fact that progress has been made. Nor should the scale of the task be underestimated. The Thai education system is going through the complex process of reorienting its focus from quantity to quality (Hallinger & Bryant, 2013; Natthapoj, 2011). Projects such as the successful integrated pest management (IPM) program, where student-centered learning and integrated curriculum provide observable models of progress in encouraging creative learning (Hallinger & Bryant, 2013; Kantamara, Hallinger & Jatiket, 2006). Recent strategies to 'return teachers to the students', increaseteachers' welfare and foster reading on the national agenda (Focus on Quality Improvement, 2009) are all steps in the right direction, but more concrete proposals are still lacking, and progress on these latest initiatives has not been reported.

Practical implications for classroom practice

The research results identified the need for teachers at high school todo more to encourage students to be individual and different. Classroom activities are invariably influenced by access to facilities and class size. It is not unusual for rural classes in Thailand to accommodate 40 or more students. Therefore, what is necessary is a set of methodological principles which can replicate a creative learning environment. Section 7 of NEA targets the promotion of "self-reliance; creativity; and acquiring thirst for knowledge and capability of self-learning on a continuous basis" (Office of the National Education Commission, 1999:5). Power (2014) put forward a set of creative behaviors which can be implicitly and explicitly encouraged to foster learner creativity. These behaviors can engage learners in the learning process and promote self-reliance, in line with the NEA's principles:

1. *Curiosity*-the learning journey begins with curiosity. Learners who are interested ask questions, the whys and why nots. Reading is central to engaging students in the learning process (Adair, 2009; Watson, 2010). By encouraging reading habits, in line with the aims of the 'Focus on Quality Improvements' guidelines, students' interest in subjects is stimulated. Learners need to be encouraged to embrace a wide range of reading materials, beyond that of the curriculum. Curiosity tends to dimin-ish with age (Csikszentmihalyi, 1997) so teachers need to encourage questioning and interest whenlearners' mental energies are at their sharpest (Power, 2014).

2. *Perseverance*-recognizing attitude as much as ability. Creative people are determined and refuse to give up in the face of adversity. Tough (2012) refers to this as 'grit'. Gladwell's (2008) observation that innovators such as Bill Gates and the Beatles put 10,000 hours or more into their creations suggests that simple hard work is a cornerstone of creativity. Students' persistence needs to be recognized as well as intelligence (Mueller & Dweck, 1998) both in the classroom environment and through assessment.

3. *Goal setting*-I have found it surprising that even at undergraduate level many students do not plan and prioritize their work. Creativity does not simply 'show up.' It requires patience and application. Focusing with greater intensity on a specific range of tasks is a hallmark of creative people (Hennessey & Amabile, 1998). Students need to be made aware of the benefits of simple checklists and time frames to the creative process (Kahneman, 2012). Most importantly, students should be encouraged to set their own, independent learning goals, irrespective of those of the curriculum.

4. *Reflection-reflection* has been widely acknowledged as being fundamental to the development of critical thinking and creativity (Ghaye, 2007; O' Connell & Dyment, 2011; Power, 2012; Sutton, Townend & Wright, 2007; Thorpe, 2004). The process of reflection increases learners' ability to distinguish insight from mere information. Students can be encouraged to keep learning journals that record their observations and insights into their own learning process. This allows them to personalize experience, to make it 'their own' (Power, 2014). These journals should be part of a student's portfolio of assessed work.

Conclusion

Fifteen years on from the NEA, although the results of reform have been seen as mixed (Fry & Bi, 2013), there is clearly room for optimism about how creativity is encouraged in Thailand. The extent to which change is often viewed as an event rather than a process (Hall & Hord, 2002) suggests that system-wide reforms, such as those by the NEA, may be slowly filtering through unnoticed. My own overall impression after visiting the universities, and after discussions with Thai undergraduates on the topic, is that students recognize the importance of creativity in education, and there is a healthy level of energy and youthful impatience about their desires to find outlets for their creative expression to help them get on in life. In particular, I was struck by the informal nature of the teacher-student relationship from the classes I observed

during the data collection process-something very different from what I had been led to expect from my research into Thai cultural norms. Indeed, this experience was notably different from that of my introduction to university life in Thailand, when first I worked here over 15 years ago. In this respect, change is clearly afoot. Given that educational transformation is synonymous with cultural transformation (Hallinger & Bryant, 2013), there is therefore a need to reassess the effect of Thai cultural norms on creativity and individuality (the most significant of which date back 20 years or more) in light of the accelerating pace of change.

The following points summarize my recommendations:
- Educational policy must target specific policies to foster creativity with input from all stakeholders.
- Teachers should recognize, encourage and reward the behaviors that enhance creativity.

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