

Comparison of cross-strait education under new generation

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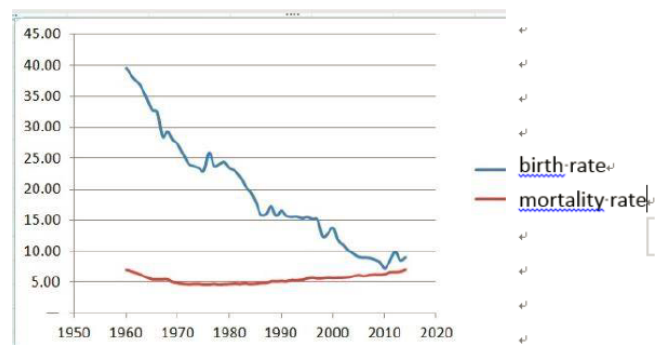
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Abstract - Global change under go, everything gets different; one might be wondering what the next will be. The rise of mainland China, although economic development has skyrocketed, but education is facing a dilemma. Taiwan is not too much to mention. Birth rate of newborn children is declining and unemployed rate the same, either reflects that there are some problems exist. This article is from the perspective of a teacher to find out the current teaching problems. From two courses the author taught; economic and management. Using arithmetic method to compare these two subjects, and found that average score and standard deviation which shows the trends are affected. The author also used students' learning questionnaire, which conducted in 2014-2017, it reflects students' learning dilemmas in both sides. Why students skip classes? Why their learning effectiveness decreasing? This study investigated the learning of college students in Cross – Strait of Taiwan. We found that Taiwan has the most student problems in two places, and China students follow in behind. Students feel depressed when they confront with stress and that will deter their learning. In the research, we discussing the source of stress and made some suggestions for the further curriculum design.

KeyWords - Classroom Assessment, psychological Measurement, Stress, Teachers.

1 Introduction

Because of the global economic downturn and poor relations between the two sides of Taiwan strait, there are many phenomena trigger people's attention. Birth-rate of newborn children in Taiwan has been declining for a long time. See Fig. 1, it really matter to the formulation of education policy. A few days ago, newspaper reported that some high schools in Taiwan announced layoffs, because of insufficient enrollment. Therefore, if the enrollment is insufficient, schools will reduce the number of faculty, and then it will come up panic. How can you ask a teacher unaffected and stay calm inside, not even to ask students to study hard? Besides this, unemployed rate of Taiwan is another problem. (Fig. 2)



Source: Ministry of the Interior population database · <http://www.ris.gov.tw/>

Fig. 1 Population birth-rate downturn

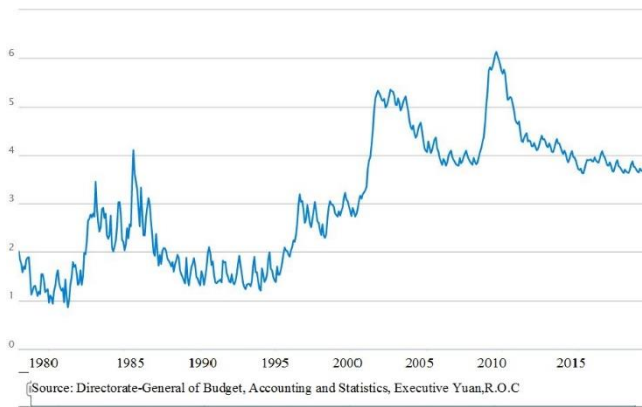


Fig. 2 Unemployed rate of Taiwan

Table 1 Unemployed rate of Taiwan

Year	average	15-19	20-24	25-29	30-34
2012	4.24	9.08	13.17	7.08	4.34
2013	4.18	9.65	13.75	7.11	4.2
2014	3.97	8.92	12.98	6.92	4.03

Source: Directorate-General of Budget, Accounting and Statistics, 2014

Compare with other countries, unemployed rate of Taiwan seems not so high, but pick up age interval of (20-24), we found the problem is young people in this age interval seems higher than the rest interval (Table 1). The rapidly developing economic of China is amazing, but some phenomenon cannot be ignored, that is education, so we are going to discuss the change of education in both sides of Taiwan Strait. We know that the goal of higher education is to foster talented people to develop the country's economic growth; however, did we see any progress in help students learning. In the paper, I am going to appraisal students' performance by the scores I gave in my class to find out what the problems beneath it.

The rise of China cannot be ignored, China's economic growth, most importantly, the impact of China on the rest of the world and on the standard of living of its own people depends mainly on whether the nation continues to double the size of its gross domestic product (GDP) [7]. Despite the reforms, in recent years China has created many miracles in its development strategy and economic reforms. China's economic reforms have successively experienced a cycle of "climax-closing" and have experienced many decision-making processes in China's economic reforms. Combining their first-hand experience and solid modern economics training is amazing [12].

2 Literature discussion

The conflict in the world continues to emerge; it affects young people's learning in all respects. Young people's problem continues to happen again; the status of young people and the prospects for the future is worrisome. Ji and Zhang [9] found the positive correlation between study conditions and mental stresses of college students. An online survey by Votta and Benau [15] found that academic concerns were a primary source of stress. When stress perceived negatively or becomes excessively, it can affect both health and academic performance [5]. University students often attempt to control and reduce their stress through avoidance, religious and social support, or positive reappraisal [11]. Another research [1] indicated that secondary school students had a medium level of stress and the significant sources of stress included academic, intra-personal and environmental. An investigation by Beiter et al., [4] indicated that the top three concerns were academic performance, pressure to succeed, and post-graduation plans. Another research [2] indicated that secondary school students had a medium level of stress and the significant sources of stress included academic, intra-personal and environmental.

Mr. Zheng Shiyan [6] said: "Education should include the following goals: to develop good attitudes, self-development, from the creation, know yourself, develop relationships, and cultivate emotions, imagination and gaining capabilities". Perry Jr[13], talking about education: A path from adolescence into adulthood is mapped from the accounts of college students. The evolution in students' interpretation of their lives is seen and understood through changes in the "forms" in which they conceptualize the issues they face. Also Geoffrey Walford [8] in his "Education Policy" mentioned: They focus on key issues with broad relevance to social scientists such as access, interviewing, data restrictions, ethical dilemmas and the role of theory.

In this research, we searching for factors influenced students' mental ability. Rucker, Derek D[14]., pointed out: "A key aim of social psychology is to understand the psychological processes through which independent variables affect dependent variables in the social domain". Also Ashmore, Richard D[3], mentioned: A Critical Analysis of Central concepts covers the thoughts, feelings, and behaviors of individuals in social interaction.

3 Method

3.1 Subject of management

Recently, I tried to figure out students' learning archives of two subjects, one is economics and another is management. The data I collected from school in the past 6 years, and found some interesting phenomenon, these analysis shows in Table 2 and Table 3. The average score around 60-70, but deviation head down slowly, and its range shows in Fig. 3. and Fig. 4.

Table 2 Analysis of management

Year	Students	Fail	Average	S.D.	Highest	Lowest
101-i	62	10	67	11.37	85	40
102-i	53	15	67	15.88	90	45
103-i	58	10	64	10.67	87	32
104-i	49	12	58	18.73	93	0
105-i	47	13	57	15.22	87	30
106-I	50	9	64	16.77	95	18

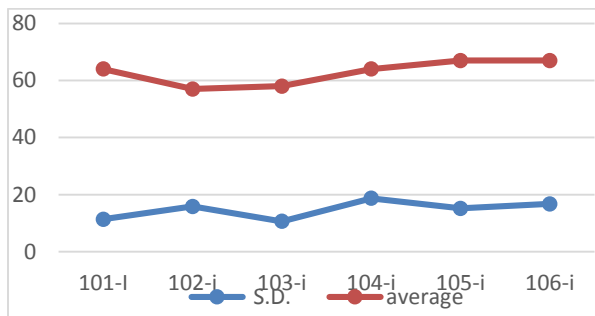


Fig. 3 Analysis of S.D.

3.2 Subject of Economic

Table 3 Analysis of economic

Year	students	Fail	Average	S.D.	Highest	Lowest
100-i	60	8	66	12.28	89	30
101-i	59	8	64	11.21	83	30
102-i	54	7	68	11.31	88	30
103-i	55	8	63	9.59	90	41
104-i	53	11	61	15.01	88	26
105-i	41	6	65	15.3	94	16
106-I	42	12	57	18.12	87	12

From above two subjects' analysis, we found when variants getting small, the figure concentrate around means (Fig. 5), contrary, it spread out more widely, it means students' score no more gathered to the mean and more students' scores close to zero. Is it good or bad?

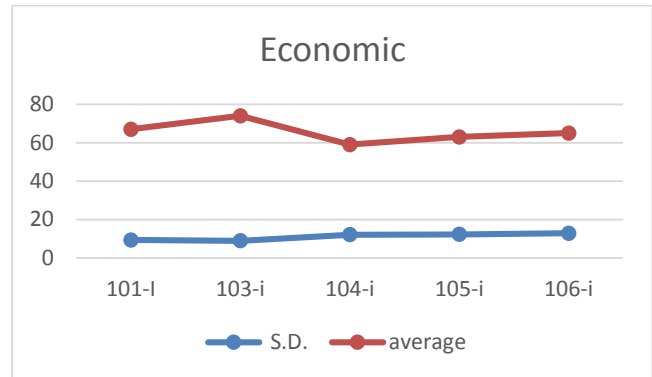


Fig. 4 Analysis of S.D.

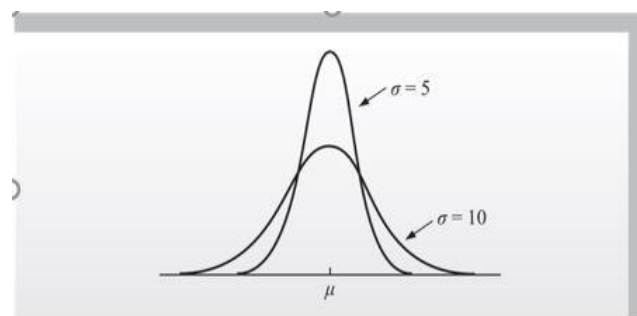


Fig. 5 In normal distribution have the same average, but different variants.

3.3 Source of stress

The following research was author's long-term study of interaction between teachers and students in Technical & Vocational Schools (OIT). There are 3 combinations, and the investigation was taken in 2014-2017, 358 college students joined the survey [16] [17]. We use a questionnaire to investigate the reaction of students learning in class. From campus students' questionnaire survey, we extracted 6 factors and it shows there were interactional deficiency between teachers and students.

This research targets on the academic institution (OIT) located at north part of Taiwan, it has 5000 students. I conducted students' stress survey to investigate under higher education system; students bear what kind of psychological pressure. The psychology scale developed by Chang [10].

Teachers in campus also bear some kinds of stress, the quantity of paper published means that he can get higher evaluation. Our choice of teaching units has been established for nearly 50 years, a wealth of teaching experience inherited between the inter-department.

3.4 Discussion the source of stress

From factor analysis, we extracted six variables. The percentage of cumulative variance was 59.19% (Table 4). We found that students' problem in the first factor "communication with the teacher" is the highest percentage of all, it means that students care most about the interaction with teachers, the other 5 factors are: learning anxiety, students' confidence, about curriculum, part-time job and social environment, it shows in Table 5.

Table 4 Total Variance Explained

component	Capture the square and loaded		
	total	variance%	accumulate%
1	20.47	34.13	34.13
2	5.08	8.47	42.60
3	3.10	5.17	47.77
4	2.65	4.42	52.19
5	2.18	3.64	55.84
6	2.01	3.35	59.19

Table 5 Students' communication with teachers

Component 1		
item	%	teachers' problem
22	0.777	teachers and students do not two-way communication
25	0.773	teachers seldom provide students with positive feedback
23	0.767	teachers' teaching content cannot be expressed clearly in class
24	0.747	teachers offer little helping to their trouble
38	0.745	bridging courses between unsatisfactory
21	0.735	teacher lectures and textbooks vary widely
31	0.73	teachers seldom encourage students to think

Table 4 was extracted from factor analysis, arrangement is based on loading value level of component 1. Students care about the time they communicate with teacher, they also expected there will be positive feedback. Most teachers know that they need to be patient and listen to students' voice. In Table 6, we compare these six factors and found that there are some other problems students got to face, three factors were higher than 4, it means that school authority should pay more attention to them and solve these problems.

Table 6 Source of stress comparison

Source of stress	Mean	SD
communication with teachers	3.0403	1.42141
learning anxiety	4.0649	1.61952
Students' confidence	3.8149	1.34274
Learning environment	4.1390	1.56369
part-time job	3.2190	1.26174
social environment	4.1937	1.58896

3.5 Compare Source of stress Cross - Strait

Table 7 Comparison of Cross - Strait Pressure Sources

Source of stress	Taiwan		China	
	Mean	SD	Mean	SD
Communication with teacher	3.2975	1.833	2.9653	1.084
Learning anxiety	4.2427	1.276	3.5187	.983
Students' confidence	3.7701	1.504	3.1187	.977
Learning environment	4.1980	1.540	3.4040	1.078
part-time job	3.6147	1.242	3.0147	.729
Social environment	3.9379	1.141	3.2760	.775

Also we compare both sides students' learning stress (Table 7), in 6 items, Taiwan is higher than these learning stress of China. So what kind of students' problems Taiwan students confront with then China will follow. Table 8 and Table 9, shows all six factors are significant correlated of Taiwan but the same factors are not significant correlated in China. Two factors of social environment and part-time job, although it is not so clear in China of students' problems, after all, it will become next issue of problems in education of China.

Table 8 Correlation between Stress Sources (Taiwan)

	F1	F2	F3	F4	F5	F6
F1	1.000	.305**	.396**	.470**	.327**	.262**
F2	.305**	1.000	.325**	.414**	.347**	.290**
F3	.396**	.325**	1.000	.379**	.480**	.317**
F4	.470**	.414**	.379**	1.000	.304**	.181**
F5	.327**	.347**	.480**	.304**	1.000	.393**
F6	.262**	.290**	.317**	.181**	.393**	1.000

**p<.001

Table 9 Correlation between Stress Sources (China)

	F1	F2	F3	F4	F5	F6
F1	1.000	.312**	.326**	.436**	.225**	.132
F2	.312**	1.000	.343**	.233**	.406**	.239**

F3	.326**	.343**	1.000	.170*	.315**	.174*
F4	.436**	.233**	.170*	1.000	.078	.201*
F5	.225**	.406**	.315**	.078	1.000	.479**
F6	.132	.239**	.174*	.201*	.479**	1.000

**p<.001

4 Results and Discussion

From above we find out the relationship between teacher and student in school seems not good at all, students attributed all problems to their teachers. Students think about their teachers as: "Teachers often give a negative evaluation - blaming or criticizing", "Teachers treat students with a lack of respect", "Teachers will not accept the views of students", "Relationship with teachers is unfriendly". Whether teachers know the reaction of students or they just concentrate on their paper publishing. Teachers contribute their energy to specific field of publication, and the authority also encourage them to do so, let the students fall into the disappointment of frustration. If teachers do not join the co-authors network social-linkage, individuals can become isolated and trapped in helpless peripheral. Publication is required in academic society and technical & vocational schools recently in Taiwan and elsewhere of the world. Crewmembers of teaching unit joining co-authorship are for the purpose to increase the quality and quantity of papers. When the trend is forming, everyone is chasing the link. However, the problem occurs in Taiwan and China in education, but the premise is that there is a good teacher-student relationship. The priority is: first teaching, the second is counseling, then is research. The current development have confused us at all. Students are also helpless; no wonder the school will fall into chaos.

The author's intention in writing this essay is to awaken public awareness so as to eliminate the lack of interaction between teachers and students, enabling students to learn happily, teachers to fulfill their destiny and scholars to concentrate on research.

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