



Socialization In Ghanaian Higher Education: Communication Design Students' Perceptions And Experiences

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Abstract:

This paper reports on students' perceptions of school's psychosocial environment in a public university in Ghana. Data was obtained with a modified Psychosocial School Environment Profile questionnaire, administered on 230 undergraduate communication design students. The data were statistically analyzed using ANOVA and MANOVA. The findings revealed that students' general perception of their school's psychosocial environment was positive but significantly different across the academic levels. This suggests that further investigation in the academic and social adjustment experience is necessary if the ultimate goal of the study is to improve motivation and identify issues that may hinder student advancement within the academia.

Keywords: School psychosocial environment, socialization, students' perceptions, higher education.

1.Introduction

A creative learning environment is defined as the physical, social, and cultural environment within which a creative activity occurs (Heimlich, 1992; Akinsanmi, 2010). There is an increasing interest and concern regarding the social environment in higher educational institutions in recent years, since educational environment is considered as one of the most important factors determining the success of an effective curriculum (Fleisher, 2006). The quality of educational environment has been identified to be crucial for effective learning (Abraham et al, 2008; Yu-Min et al, 2001). An effective teaching and learning environment has a great positive impact on the student's creative development (Lowenfeld and Brittain, 1987). Students always tend to prefer a friendlier atmosphere, where students and teachers collaborate to engage in a greater variety of interesting but challenging activities. Such a learning environment will tend to promote a deeper, more achievement-oriented approach to learning, which students would prefer.

1.1.Socialization Process

According to Gardner (2010) "Socialization is the process through which an individual learns to adopt the values, skills, attitudes, norms, and knowledge needed for membership in a given society, group, or organization". Socialization is considered important in the process of personality formation (Agyeman, 1986). It is viewed to commence immediately we are born, where we learn from and adapt to our immediate environment, as we go through the different phases of our development. According to Bragg (1976) as cited in Gardner (2010), socialization occurs at three levels: (a) the interaction of students with the structures of the educational setting, (b) the interaction among students in the same educational program (i.e., discipline or department) and (c) the interaction between students and faculty members. She continued that "the structure of the educational setting [a]ffect[s] or facilitate[s] change in the student's attitudes and values because they reflect the attitudes and values of the profession itself". Gardner further hinted that the structural elements of the socialization process include "the student selection process, the isolation of students from outside influences, the consistency of program goals, the explicitness of values and role models, the provision of opportunities for practicing responses (i.e., coursework, examinations, internships, or practicals), and the provision of both positive and negative sanctions as feedback to students". She continues to argue that peer interactions also serve to promote the

socialization process, more especially as newer students interact with more older students in “learning the ropes” of the programme.

1.2. The School's Social Environment

According to Gådin and Hammarström (2003) the school's psychosocial environment can be defined as “the social situations at school in relation to pupils' work situation (such as teacher support, work demands and influence over school work) as well as in relation to pupils' peer relations at school”. Beyond the school being an institution that trains students to acquire broader knowledge and skills in a chosen discipline, education, by and large is a social institution, where according to Agyeman (1986) the individual develops into becoming a social being. Thus, education in the broadest sense imbibes in people defined behavioural patterns which govern human interaction and relationships. Agyeman further opines that the challenges with education, has more to do with social problems which teachers, administrators and policy-makers have to contend with and solve, he continued to define five thematic and problematic areas as follows:

- Education takes place in the social group i.e. in the family, kinship unit, peer groups and school class.
- Education requires division of labour.
- Challenges with socialization process and how it affects personality formulation and personality change.
- Social ideas and values that underline educational practice.
- The relation between education and society.

For this study however, the researchers wish to pay attention to two out of the five problematic areas: challenge within the social group and the socialization process.

Under the social group, Agyeman opines that the following social psychological problems are rather delicate and affect the school environment and student achievement: “emotional tensions, likes and dislikes, attitudes and prejudices” of teachers. He further notes that socialization possesses problems in the following areas: “personality formulation and personality change”. He posits that the individual student learns to adapt and live within a new social environment to become a “social member” (Agyeman, 1986).

The World Health Organization's (WHO) report on the perspectives on schools' psychosocial environment reckons that the school's environment can enhance social and emotional well-being and learning. When it is warm, friendly and rewards learning, it promotes cooperation rather than competition. It is supportive, opens up communications and views the provision of creative opportunities as important among others. A healthy psycho-social environment simultaneously provides support to teachers, students and their families which improve school achievement. As a solution to providing the best of school environment, Farooqi (2009) suggests that schools should take up the responsibility of providing an ideal school environment where learning of social and emotional competence is paramount; teaching and learning of such skills are always useful during the later stages of life, when such skills are most needed. He views curriculum which comprises the teaching and learning of academic and intellectual abilities as well as social and emotional competence, as the true sense of education. Opeha (2010) quotes a report posted by Canadian Ministry of Education and the Ministry of Health Promotion's Foundations for a Healthy School in Ontario and states that, "a supportive social environment has a positive impact on students' learning". Thus practitioners in the school system foster such an environment in which students, teachers, and parents may benefit from the support provided. Forms of such support are, school policies, rules, associations, or support groups and in an informal unstructured peer interaction.

1.3.School Environment: As A Source Of Extrinsic Motivation

Ryan and Deci (2000) as cited in Shertzer (2006) posit that "individuals are extrinsically motivated when they are engaged in an activity to attain a separable outcome" According to Shertzer (2006), motivation is an internal state that arouses the individual to action, pushes people in particular directions, and keeps them engaged in certain activities. Weller (2005) opines that the school environment can be used to focus the student's attention on what needs to be learned. Furthermore, school climate can play a significant role in providing a healthy and positive school atmosphere (Marshall, 2004). The reactions of higher education administrators and teachers who create affection and accept efficient atmospheres will promote persistent effort and favourable attitudes toward learning.

In this paper the researchers first review four important dimensions of the school social environment (school support, promoting mutual respect, promoting student task-related

interaction, promoting performance goals) and their associations with adaptive outcomes for young adolescent students. This study focused on the application of modified Psycho-Social Environment (PSE) Profile Questionnaire in a higher education setting. The aims of this exploratory research was to use multilevel analysis to investigate the influence of student gender, academic grade level, and ethnicity on students' perceptions of the school's psychosocial environment as assessed by scales of the PSEQ.

2. Methodology

The study employed quantitative method to explore students' perceptions about their school's psychosocial environment in the Department of Communication Design. A descriptive survey was conducted using a self-administered questionnaire to garner opinions. Leedy and Ormrod (2005) describe the purpose of a descriptive survey as providing the opinions of respondents regarding the phenomenon studied. Descriptive research provides a precise account of the characteristics of a particular individual event or group in real life situation.

2.1. Participants

The participants were 174 undergraduate students from the Kwame Nkrumah University of Science and Technology, a public tertiary institution that offers undergraduate as well as graduate studies in the physical sciences, technology and social sciences. The University is similar to other public Universities in Ghana. The official language of communication in Ghana is English. Also, all the respondents had their pre-tertiary education in Ghana. The sampled students constitute 28% of the entire undergraduates students in the Department of Communication Design, Faculty of Art in the University under study. Table 1 contains the main characteristics of the sample.

Category	Frequencies	
	N	%
Academic Level		
Year 1	38	21.8
Year 2	20	11.5
Year 3	65	37.4
Year 4	51	29.3
Gender		
Male	106	60.9
Female	68	39.1
Ethnic Background		
Akan	100	57.5
Ga Adangbe	26	14.9
Ewe	32	18.4
Dagbane	11	6.3
Other	5	2.9

Table 1: Frequencies of the Background variables (204)

Note: The participants' mean age was 23.4 years (SD = 2.588)

2.2. The Research Instrument

Perceptions of psychosocial environment were investigated using the PSE profile instrument. The original instrument contained 90 items and is not particularly prudent to use. Consequently, the instrument was shortened and modified slightly for particular educational situations. The short form of the PSE profile contains three scales with varying items per scale.

- The student cohesiveness subscale consists of 6 items (e.g., “Students are encouraged to welcome and assist newcomers to the school. How much is this like your school?” “There is a trusted person who the students know they can approach if they have a problem or need confidential advice. How much is this like your school?” “Students have a strong sense of belonging to the school. How much is this like your school?”).

- The teacher support subscale consists of 7 items (e.g., “Feedback about a student’s work is accompanied by positive comments about achievements and suggestions for improvement.” “Teachers support students who are in distress.”).
- The equity subscale consists of 6 items (e.g., “Students have the opportunity to speak, and be listened to, in class” “The school actively involves students in decisions about how the school is organized” “Girls and boys are treated as equals”).

The participants indicated their responses on a 4-point Likert-type scale (1 = Not at all; 4 = Very much). To assess each psychosocial tactic, we averaged responses of the corresponding subscales.

2.3.Data Collection

The instrument was administered to undergraduate students (n=190) near the end of the second semester in 2009/10 academic year, and it took about 15 minutes to complete the instrument. The 19-item modified version of the PSE profile and responses were recorded directly on the questionnaire. Before administration of the instrument in Ghana, a pilot study involving 10 first year students was conducted (ten indigenous Ghanaians). The students marked the questionnaire items they found irrelevant and were subsequently interviewed to clarify ambiguity. The participants in the pilot study found no difficulty in using the PSE profile instrument. Out of the 183 questionnaires returned, 9 were rejected for poor handling leaving 174 representing 91.5% return rate. The questionnaires were administered during classes and just after classes to ensure high return rate. Participation in the survey was purely voluntary.

2.4.Data Analysis

The Statistical Package for Social Sciences (SPSS 16.0) software was employed to examine the data; the desired scale of measurement was nominal. This is a scale of measurement with two or more categories that have numeric properties. The students recorded on the survey instrument the response that most closely agreed with their experience. Statistics gathered included means, frequencies, standard deviations and regressions. Findings are depicted using tables. This statistical test measured the significance of difference (Ferguson, 1981). The level of significance was set at .05.

2.5. Internal Consistency Reliability Of The Modified PSE Profile

Data analysis of the inter-items correlation matrix in Table 2 shows that the Cronbach alpha coefficient (α) for scale items to above 0.60 indicates the strength of the instrument.

Table 3 demonstrates that students' perceptions of the psychosocial environment are positive. The mean scores for all scales increased from 2.30 to 2.67 for promoting equal opportunities. The perceptions of the school's psychosocial environments show a narrow standard deviation range of less than 1 (from 0.53 to 0.55). Equity scale indicates a mean of 2.67 and Standard Deviation of 0.55, showing students' perceptions are very positive in the use of the modified PSE survey to differentiate between students' attitudes to learn communication design and the nature of the school's learning environment. As an example, promoting equal opportunities and participation in school activities rates highly with a mean of 2.84.

Scale	Items	Alpha
Student Cohesiveness	The school is friendly and welcoming to visitors.	.686
	Students are encouraged to welcome and assist newcomers to the school.	.688
	The school has a policy on how to integrate new students into the school.	.714
	Students are confident that they will get help and support when they need it. How much is this like your school?	.725
	Students have a strong sense of belonging to the school.	.682
	Students are concerned about what happens to each other.	.733
Teacher Support	Staff encourage the students to care for each other.	.757
	Teachers support students who are in distress.	.731
	There is a trusted person who the students know they can approach if they have a problem or need confidential advice.	.743
	Feedback about a student's work is accompanied by positive comments about achievements and suggestions for improvement.	.741
	Staff behave in a purposeful and orderly manner.	.734

	Staff have a strong sense of belonging to the school.	.750
	Staff are concerned about what happens to each other.	.728
Equity	Students have the opportunity to speak, and be listened to, in class.	.696
	There is a procedure that enables all students to openly express their feelings and thoughts about school work and school life.	.700
	Students take part in activities that help them to recognize, understand and value differences between them.	.746
	Students who are 'different' in any way are treated with respect and equality.	.765
	Girls and boys are treated as equals.	.708
	Girls and boys have the same opportunities to reach their potential.	.713

Table 2: Internal Consistency Reliability of the Scale Inter-Items

Variables	Cronbach's Alpha	Scale Means	Standard Deviation
Student Cohesiveness	.742	2.389	.537
Teacher Support	.769	2.429	.509
Equity	.758	2.667	.556

Table 3: Internal Reliability (Cronbach Alpha Coefficient) Scale Means and Standard deviations for Modified Version of the PSE (n=174)

2.6. Correlational Analyses

The correlation patterns evinced consistent inter-item correlations among the three scales are shown in Tables 4 - 6. The interrelations among the items under the student cohesiveness scale revealed a positive correlation between them, with the highest between “the school is friendly and welcoming to visitors” and “students are encouraged to welcome and assist newcomers to the school” ($r = .535, p < .05$) (Table 4). The inter-item correlations among the teacher support subscales also revealed a positive relations, the highest between “Staff have a strong sense of belonging to the school and “Staff are concerned about what happens to each other” ($r = .476, p < .05$) (Table 5). The inter-item

correlations for the equity were also positive, with “Girls and boys are treated as equals” and “Girls and boys have the same opportunities to reach their potential” ($r = .681, p < .05$). Table 7 shows the intra-class correlations of the scales indicate that the instrument was capable of distinguishing between classes.

Group	1	2	3	4	5	6	M	SD
1. Friendly	1.000						2.54	.844
2. Encourage	.535	1.000					2.41	.834
3. Integration	.336	.400	1.000				2.46	.830
4. Confidence	.191	.172	.378	1.000			2.26	.742
5. Sense of belonging	.400	.392	.331	.382	1.000		2.29	.812
6. Concern for others	.326	.271	.091	.275	.355	1.000	2.37	.806

Table 4: Interscale Correlations for Student Cohesiveness

***.* Correlation is significant at the 0.01 level (2-tailed).

**.* Correlation is significant at the 0.05 level (2-tailed).

Group	1	2	3	4	5	6	7	M	SD
1. Encourage	1.000							2.47	.809
2. Support students	.386	1.000						2.40	.766
3. Trusted person	.211	.429	1.000					2.44	.870
4. Provide feedback	.329	.295	.351	1.000				2.39	.726
5. Behave orderly	.285	.362	.324	.415	1.000			2.55	.757
6. Strong sense	.234	.267	.210	.271	.313	1.000		2.40	.825
7. Concern for others	.226	.358	.406	.278	.379	.519	1.000	2.36	.738

Table 5: Interscale Correlations for Teacher Support

***.* Correlation is significant at the 0.01 level (2-tailed).

**.* Correlation is significant at the 0.05 level (2-tailed).

Group	1	2	3	4	5	6	M	SD
1. Opportunities to speak	1.000						2.87	.887
2. Open expression	.582	1.000					2.63	.834
3. Participation in social activities	.316	.325	1.000				2.46	.734
4. Respect and equality	.293	.322	.288	1.000			2.54	.787
5. Gender equality	.357	.381	.283	.141	1.000		2.64	.834
6. Chance to succeed	.426	.336	.218	.135	.681	1.000	2.86	.869

Table 6: Interscale Correlations for Equity

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Scale	1	2	3
1. Student Cohesiveness	1.000		
2. Teacher Support	.655	1.000	
3. Equity	.450	.549	1.000

Table 7: Inter-Item Correlation Matrix (n=174)

3. Results

3.1. School Psychosocial Environment Compared among Communication Design Students

3.1.1. Question 1: What differences exist between communication design students' perceptions of the school's psychosocial environment.

In accordance with Cramer and Bock (1966), a MANOVA was first performed on the means to help protect against inflating the Type 1 error rate in the follow-up ANOVAs and post-hoc comparisons. However, prior to conducting the MANOVA, a series of Pearson correlations (Tables 4- 7) were performed between all of the dependent variables in order to test the MANOVA assumption that the dependent variables would be correlated with each other in the moderate range (i.e., .20 - .60; Meyers, Gampst, & Guarino, 2006). As can be seen in Table 4, a meaningful pattern of correlations was observed amongst most of the dependent variables, suggesting the appropriateness of a

MANOVA. Additionally, the Box's M value of 123.81 was associated with a p value of .292, which was interpreted as non-significant based on Huberty's and Petoskey's (2000) guideline (i.e., $p < .005$). Thus, the covariance matrices between the groups were assumed to be equal for the purposes of the MANOVA.

A one-way multivariate analysis of variance (MANOVA) was conducted to test the hypothesis that there would be one or more mean differences between education levels, gender and ethnicity and school psychosocial environment scores. To investigate this question a MANOVA with the three subscales of the school psychosocial environment instrument constituting the depending variables and the set of independent variables of academic level, gender and ethnicity was performed. A statistically significant MANOVA effect was obtained, Pillai's Trace = .117, $F(9, 423) = 1.910$, $p < .05$. The multivariate effect size was estimated at .039, which implies that 3.9% of the variance in the canonically derived dependent variable was accounted for by academic level.

Prior to conducting a series of follow-up ANOVAs, the homogeneity of variance assumption was tested for all three school psychosocial environment subscales. Based on a series of Levene's F tests, the homogeneity of variance assumption was considered satisfied, even though all the three Levene's F tests were statistically significant ($p > .05$). Specifically, although the Levene's F test suggested that the variances associated with the three subscales were not homogenous, an examination of the standard deviations (see Table 8) revealed that none of the largest standard deviations were more than four times the size of the corresponding smallest, suggesting that the ANOVA would be robust in this case (Howell, 2009). A series of one-way ANOVA's on each of the three dependent variables was conducted as follow-up tests to the MANOVA. As can be seen in Table 8, one of the ANOVA's were not statistically significant, with effect sizes (partial η^2) ranging from a low of .010 (teacher support) to a high of .056 (student cohesiveness). Calculation of effect sizes were performed for the academic levels for Student Cohesiveness scale only. The effect size between Year 1 and Year 2 was low (.11) and other effect sizes between Year levels were moderate ($.5 < d < .1$).

Scales	n	Mean	SD	Levene's		ANOVAs		
				$F_{(3,141)}$	p	$F_{(1,170)}$	p	η^2
Student Cohesiveness								
Year 1	38	2.33	.370	2.057	.002	5.044	.026	.056
Year 2	20	2.28	.563					
Year 3	65	2.31	.518					
Year 4	51	2.59	.612					
Teacher Support								
Year 1	38	2.35	.360	1.713	.018	1.62	.204	.010
Year 2	20	2.40	.584					
Year 3	65	2.45	.527					
Year 4	51	2.48	.555					
Equity								
Year 1	38	2.57	.373	1.810	.010	4.27	.040	.039
Year 2	20	2.43	.606					
Year 3	65	2.73	.573					
Year 4	51	2.75	.602					

Table 8: One-way ANOVA's with PSE Subscales as Dependent Variables and Academic levels as Independent Variable Note: $N = 174$, $\eta^2 =$ Partial eta squared.

4. Discussion

This finding aligns with the research conducted by Tasmajian (2002) who found that new students to school are likely to be challenged by two new set of socialization agents: the classroom teacher (and school staff) and peers in the acceptance process due to uncertainty and anxiety inherent in new school experiences. This finding also corroborates with the research conducted by Weidman (2011) who noted that "During their passage through academic programs, students encounter the normative influences of peers and faculty in both formal and informal settings (e.g., majors, peer groups, co-curricular activities), ultimately personalizing those experiences by either changing or maintaining perspectives held at entrance to higher education at either the undergraduate

or graduate level.” In sum, the analyses show that differences exist among the academic levels in terms of students’ perceptions about school’s psychosocial environment. Dorman (2009) concluded that “grade was a statistically significant positive determinant of student affiliation, cooperation and individualization. These results are generally consistent with previous studies on the effect of grade on school and classroom environment by Said et al. (2009); Wei and Elias (2011). Said et al’s (2009) study highlights the apparent differences in how the different groups experienced the learning environment at the institution due to their degree of experience in both the institution and the curriculum. Wei and Elias (2011) found that most of the Form four students perceived affiliation to be the most important dimension in their classroom.

Again, the findings of this study corroborates with the findings of Karp et al’s (2008) study on social and academic integration of beginning community college students. They posited that “student integration is developed through participation in information networks. These networks allow students to navigate the campus environment, access knowledge about the college, create a sense of social belonging, and, ultimately, feel that there are people who care about their academic welfare.” They further referred to classroom structures as very important in building relationships; undoubtedly the communication design pedagogy provides such platform that stimulates student-student and teacher-student interaction in addition to the student-centeredness of the pedagogy which is structured on studio/problem-based learning.

However, the average mean value (2.51) across the four academic levels suggests that students have positive perceptions in terms of school psychosocial environment in Kwame Nkrumah University of Science and Technology.

5. Conclusion

The purpose of this study was to better understand students’ perceptions of school psychosocial environment. The findings from this study contributed to this under-examined area of the literature as well as provided implications for those who work with students at the tertiary level. The results indicated students were generally positive about their perception of their teacher’s interpersonal behaviours (dispositions); thus the school psychosocial environment in Ghana was identified as being one which is friendly and accompanied by warm relationships. Students perceived warm relationships with both other students and teachers.

The strong Ghanaian socio-cultural background could have had positive impact on the results since the participants have many things in common. Most of them come from similar economic and social classes. Almost all respondents share similar cultural background (largely Akans 55.5%); again they have common educational background having attended government-assisted senior high schools. They also share a closely knit social and cultural environment (Agyeman, 1986). The researchers could deduce that the open, friendly and hospitable Ghanaian nature being clearly exhibited by the continuing students toward the newcomers or “freshers” (a common term for freshmen). The results also suggest students’ interaction with non-academic staff and perception of administrators’ involvement in students’ affairs was generally high and encouraging. The general impression that could be deduced from the study is that students welcome and appreciate any opportunity that could foster and promote communalism; a “we-feeling” among the student body (Sprinthall et al., 1994; Agyeman, 1986) within the department, as much as opportunities and participation in decision making.

A major contribution of the present study is the modification and validation of a questionnaire for assessing and improving higher education students’ perceptions of their actual school psychosocial environment in Ghana. Although a limited number of studies of the learning environment have been conducted at the primary-school level around the world and this was the first at this level in Ghana. The outcomes of this study indicate that a reliable and valid adaptation of the PSE for the Ghanaian context could be made. The instrument consisted of 26 items and displayed high reliability. Also, the instrument could clearly distinguish between classes, because intra-class correlations were very high. In fact, these correlations were similar to studies (e.g. Wubbels et al. 2006). Scale scores appeared to be structured in terms of two uncorrelated dimensions and were circularly ordered, which is in accordance with the model. The Ghanaian version of the PSE showed adequate predictive validity, because both dimensions were positively correlated with student outcomes, particularly students-teacher relationship. Again, this finding is in line with other research on the WIHIC and QTI (den Brok et al. 2006; Coll et al., 2001) and confirms the quality of the constructed version.

The present study was subject to some common limitations. First, the study covered a relatively small sample (located in one institution). Unfortunately, results cannot be generalized to other tertiary institutions or the country as a whole—as the sample differed in terms of gender and academic level makeup—and future research with larger samples from different institutions will be necessary to see to what degree outcomes

change if more representative samples are used. The authors are currently in the process of gathering a larger data set for this purpose.

6.Recommendations

In every educational institution, the learning environment is the bedrock of excellence in academic achievement. Educational structures that must be put in place such as a conducive school environment, good inter-personal relationships between teachers and students, available academic facilities, and also appropriate and congenial teaching and learning styles used by teachers and students. The main aim of this research was to know how students perceive their school environment (i.e. Department of Communication Design). Based on the survey conducted, it was observed that, provision of adequate platform for dialogue and respect for students' rights would improve relationships. Additionally, the social environment needs further fine-tuning and innovation. Even though the results suggest the overwhelming approval of the psychosocial environment, attention should be given to students with special needs. Regular evaluation of the school's psychosocial environment would go a long way to improve students' achievement and social networking among students.

7.Recommendations for Further Study

Additional questions pertaining to whether or not the student improves on his/her socialization skills at higher education warrant further investigation; thus the following recommendations for further research and study are offered:

- This study should be replicated, using a different population from art related disciplines to determine whether or not the student improves on his/her socialization skills at higher education.
- A study should be conducted to determine whether or not socialization skills are acquired in a home school setting or traditional school setting.
- A study should be conducted to determine whether the teacher holds the primary role in the social development of a student.

8.Reference

1. Abraham, R., Ramnarayan, K., Vinod, P. and Torke, S. (2008). Students' perceptions of learning environment in an Indian medical school. BMC Medical Education. Accessed on 2-12-2010 from <http://www.ncbi.nlm.nih.gov/pubmed/18402710>.
2. Agyeman, D. K. (1986). Sociology of education for African students. Accra: Black Mask Ltd. pp 26-110.
3. Akinsanmi, B. (2010). Optimal learning environments: societal expectations, learning goals and the role of school designers. Accessed on 05-12-2010 from <http://www.designshare.com/index.php/articles/optimal-learning-environments-societal-expectations-learning-goals-and-the-role-of-school-designers>.
4. Brok, P. den, Fisher, D., Rickards, T. & Bull, E. (2006). Californian science students' perceptions of their classroom environments. Educational Research and Evaluation, 12(1), 3-25.
5. Coll, R. K., Taylor, N. and Ali, S. (2001). Investigating Tertiary Level Teacher-Student Interactions in Fiji using the Questionnaire on Teacher Interaction (QTI). Directions: Journal of Educational Studies, 23 (2), pp. 91-112.
6. Cramer, E. M., & Bock, R. D. (1966). Multivariate analysis. Review of Educational Research, 36, 604-617.
7. Dorman, J. P. (2009). Some determinants of classroom psychosocial Environment in Australian Catholic high Schools: a multilevel analysis. Catholic Education: A Journal of Inquiry and Practice, 13 (1), p. 7-29.
8. Edmondson, L., Fetro, J. V., Drolet, J. C. and Ritzel, D. O. (2007). Perceptions of physical and psychosocial aspects of a safe school. America Journal of Health Studies. 22(1), pp.1-7.
9. Eshun, E. F. and Adu-Agyem, J. (2010). Learners perceptions in design critiques: impact on creative development. Journal of Science and Technology 30(3), pp. 42-50.
10. Farooqi, S. (2009). The ideal school environment: building social and emotional competence in students. Accessed on 8-11-10 from

<http://www.wellsphere.com/mental-health-article/the-ideal-school-environment-building-social-and-emotional-competence-in-students/788707>.

11. Ferguson, G. A. (1981). *Statistical analysis in psychology and education* (5th ed.). New York: McGraw-Hill Book Company.
12. Fraser, B. J. (1998). Science learning environments: Assessments effects and determinants. In B. J. Fraser, & Tobin, K. (Eds.), *International Handbook of Science Education* (pp.527-564). Dordrecht: Kluwer Academic Publishers.
13. Fleisher, S. C. (2006). Intrinsic self-regulation in the classroom. *Academic Exchange Quarterly* (winter, 2006). Accessed on 10-09-2010 from http://findarticles.com/p/articles/mi_hb3325/is_4_10/ai_n29328241/
14. Gardner, S. K. (2010). Faculty Perspectives on Doctoral Student Socialization in Five Disciplines . *International Journal of Doctoral Studies*. Vol. 5. Accessed on 24-06-12 from <http://ijds.org/Volume5/IJDSv5p039-053Gardner293.pdf>
15. Heimlich, J. E. (1992). Promoting a Concern for the Environment. ERIC Clearinghouse for Science, Mathematics and Environmental Education Columbus OH. Accessed on 05-12-2010 from <http://www.ericdigests.org/1992-1/concern.htm>.
16. Huberty, C. J., & Petoskey, M. D. (2000). Multivariate analysis of variance and covariance. In H. Tinsley and S. Brown (Eds.) *Handbook of applied multivariate statistics and mathematical modeling*. New York: Academic Press.
17. Karp, M. M., Hughes, K. L. and O’Gara, L. (2008). An exploration of tinto’s integration framework for community college students. CCRC Working Paper No. 12. Columbia University: Community College Research Center Teachers College.
18. Leedy, P. D. and Ormrod (2005). *Practical research: planning and design*. (8th edition). New Jersey: Pearson Education International.
19. Lowenfeld, V. K. and Brittain, L. W. (1987). *Creative and Mental Growth*. Macmillan Publishing Co. Inc., London: Collier Macmillan Publishers.
20. Meyers, L.S., Gamst, G., & Guarino, A. (2006). *Applied multivariate research: Design and interpretation*. Thousand Oaks, CA: Sage Publishers.
21. Opeha (2010). A supportive social environment. Accessed on 20-11-10 from <http://www.ophea.net/node/614>.
22. Patrick, H. and Ryan, A. M. (2003). Identifying adaptive classrooms: analyses of measure of dimensions of the classroom social environment. Paper prepared for

- Positive Outcomes Conference, March 12-13, 2003. Post-conference revised version, May 2003.
23. Said, N. M., Rogayah, J and Arzuman Hafizah, A. (2009). A Study of Learning Environments in the Kulliyah (Faculty) of Nursing, International Islamic University Malaysia. *Malaysian Journal of Medical Sciences* , 16 (4), Oct-Dec, 2009 pp. 15-24.
 24. Shertzer, M (2006). Motivating students to learn from a father-daughter perspective. *The Agricultural Education Magazine*, Accessed on 16-09-09 from <http://www.allbusiness.com/agriculture-forestry-fishing-hunting/10460311-1.html>.
 25. Sprinthall, N. A., Sprinthall, R. C., and Oja, S. A. (1994). *Educational Psychology: A developmental approach*. 6th Ed. New York: McGraw-Hill, NC. pp.144-496.
 26. Tasmajian, D. (2002). Socialization skills acquired by elementary school children. *Undergraduate Research Journal for the Human Sciences*. Volume 1. Accessed 12-0611 from <http://www.kon.org/urc/tasmajian.html>.
 27. Wei, L. S and Elias, H. (2011). Relationship between students' perceptions of classroom environment and their motivation in learning english language. *International Journal of Humanities and Social Science*, 1(21) [Special Issue - December 2011], pp. 240 – 250.
 28. Weidman, J. (2011). Socialization of students in higher education: organizational perspectives. *The SAGE Handbook for research in Education 2006*. SAGE Publications.
 29. Weller, M. (2005). *General Principles of Motivation*. Retrieved on March 30, 2010 from <http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/motivate.html>.
 30. WHO, UNICEF, EDC, UNESCO, World Bank, PCD and EI, (2003). *Creating an Environment for Emotional and Social Well-Being: An important responsibility of a Health-Promoting and Child Friendly School*. WHO Information Series on School Health – Document 10. Geneva: WHO. Accessed on 08-11-10 from http://www.who.int/school_youth_health/media/en/sch_childfriendly_03.pdf
 31. Wubbels, Th., Brekelmans, M., den Brok, P., & van Tartwijk, J. (2006). An interpersonal perspective on classroom management in secondary classrooms in

the Netherlands. In C. Evertson & C. S. Weinstein (Eds.), Handbook of classroom management: Research, practice and contemporary issues (pp. 1161–1191). New York: Lawrence Erlbaum Associates.

32. Yu-Min, C., Hsiao-Hui, Y., Chy-Ling, K. and Hung-Wen, C. (2001). A study on the teaching environment perception for college students. International Conference on Engineering Education. August 6 – 10, 2001 Oslo, Norway.