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Student-Teachers in Higher Education Institutions' (HEIs) Emotional Intelligence and Mathematical Competencies

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Abstract
As manifested by various studies conducted, the present state of Mathematics education in the teaching-learning process is relatively declining and the existing effort to identify emotional intelligence and mathematics competencies of Mathematics major student-teachers at Higher Education Institutions in Isabela is an attempt to help alleviate the degenerate situation, in more especially that these student-teachers will eventually enter the teaching profession in the soonest possible time. It aimed to determine the emotional intelligence of the student-teachers in terms of emotional literacy, emotional quotient competencies and emotional quotient values and attitudes and determine the level of competence of the student-teachers in elementary algebra, intermediate algebra, advanced algebra, geometry, trigonometry and statistics.

The level of emotional intelligence of student-teachers in terms of emotional literacy, emotional quotient competencies and emotional quotient on values and attitudes of the respondents registered "Vulnerable" results and their level of mathematical competence in elementary algebra, intermediate algebra, advanced algebra, geometry, trigonometry and statistics were rated "Satisfactory".
Keywords: aptitude, proficiency

1. Introduction

Teachers are the key factors in classroom learning. They play various roles in order to bring out the desired changes in the behaviour of learners. The task of teachers demands a great amount of professional and personal competence. Hence, Teacher Training Institution (TTI) have to adequately prepare their students in order to meet the requirements of teaching like desirable work values, mastery of subject matter, patience, emotional stability and many others that they may become contributory to the attainment of quality education.

Mathematics is one of the key subjects in Philippine education curriculum. If one is mathematically inclined, it follows that learners generally excel in other subjects and it opens to a lot of opportunities.

Curriculum planners relentlessly sketch major changes and map out trends to improve learners' competence, however, it is quite lamenting to note that the present status of education in the country reveal an appalling performance of both students and graduates in mathematics.

The Philippine government recognizes its role in the delivery of quality education to its people in the 1986 Constitution particularly on its Article 14 on Education, Science and technology, Arts, Culture and Sports. Section 1 specifically underscores that the state shall protect and promote the right of its citizens to quality education accessible to all. On the scenario therefore where the country experiences a dwindling proficiency in Mathematics, HEIs need to step in and arrest the existing problem before it worsens. HEIs have to adequately prepare their graduates to meet the demand for an improved quality of education especially along mathematics.

1.1 Methodology

The 74 respondents were taken from the different HEIs in the province of Isabela namely Northeastern College, University of La Sallete, Isabela State University, Philippine Normal University and Saint Ferdinand. The emotional intelligence questionnaire, EQ Map^{TM}, developed by Cooper and Sawaf (1997), was used to determine the respondents' emotional literacy, emotional quotient competencies and emotional quotient values and attitudes. The mathematical competency test, developed and validated by Aguinaldo (2003),was also used to determine the mathematical competency of the respondents.

1.1.2. Results and Discussion

Table 1. Emotional Intelligence of Student-Teachers in terms of Emotional Literacy.

Emotional Literacy	Mean	Description
1. Emotional Self-Awareness	2.13	Vulnerable
2. Emotional Expression	2.03	Vulnerable
3. Emotional Awareness of Others	2.08	Vulnerable
Overall Rating	2.08	Vulnerable

Along emotional literacy, a "vulnerable" result was seen which implies that student-teachers moderately demonstrate emotional self-awareness, emotional expression and emotional awareness of others. Furthermore, it infers that student-teachers has the ability to recognize, present and deal with the reactions, feelings and thought

of other people in a given situation. This result negates the findings of Abu (2008) who claimed that emotional intelligence of High School students of rang-Ayan National High School is in "proficient" level.

Table 2. Emotional Intelligence of Student-Teachers in terms of Emotional Quotient Competency.

Emotional Quotient Competency	Mean	Description
1. Intentionality	2.11	Vulnerable
2. Creativity	2.12	Vulnerable
3. Resilience	2.14	Vulnerable
4. Interpersonal Connections	2.12	Vulnerable
5. Constructive Discontent	1.99	Vulnerable
Overall Rating	2.096	Vulnerable

Table 2 shows "Vulnerable" results to emotional intelligence of student-teacher in terms of emotional quotient competency. This shows that student-teachers could identify, define and know the way of realizing their goals but often depend into their daily activities. They have some wavering ideas in constructing and devising on anything but frequently rely on circumstances. The respondents can easily adjust on situation; they can get along well with others and manifest the feeling of belongingness. They demonstrate characteristics in expressing their thoughts in order to find solutions to a given problem. This finding is parallel to Goleman (1995) who stated that intelligence quotient offers little to explain different destinies of people with roughly equal promise, schooling and opportunity.

Table 3. Emotional Intelligence of Student-Teachers in terms of Emotional Values and Attitudes.

Emotional Values and Attitudes	Mean	Description
1. Outlook	2.44	Vulnerable
2. Intuition	2.06	Vulnerable
3. Trust Radius	2.13	Vulnerable
4. Personal Power	1.96	Vulnerable
5. Integrity	1.85	Vulnerable
6. Compassion	2.05	Vulnerable
Overall Rating	2.08	Vulnerable

Table 3 shows "vulnerable" result on all of the items. This shows that the respondents are positive thinkers and see things optimistically, it indicates some instinctive insight or perception and yet changeable depending on a situation. It exhibits a manner of attaining faith and belief into somebody before coming up a decision and action. Also, respondents believe on their personal ability or self-concept which consists of their confidence to perform some tasks and challenges but do not like to boost their accomplishments. Bustos and Espiritu (1996) explained the scenario by saying: The Filipino avoids brutal frankness and direct confrontation. He is highly sensitive; as a result, he does not want to be hurt the sensitivity of other by direct criticizing him. He will try to find out what one wants to hear father than say out-right what he himself thinks. He would like to be pleasant even in trying circumstances rather than impose pain on others.

Table 4. Level of Mathematical Competence of Student-Teachers.

Areas	Mean Score	Description
1. Elementary Algebra	21.28	Very Satisfactory
2. Intermediate Algebra	17.46	Satisfactory
3. Advanced Algebra	5.86	Fairly Satisfactory
4. Geometry	17.35	Satisfactory
5. Trigonometry	8.00	Satisfactory
6. Statistics	8.22	Satisfactory
Overall Rating	13.03	Satisfactory

The student-teachers'level of mathematical competency manifests a "satisfactory" rating which means that student-teachers have the capability to teach the major subjects. Nevertheless, they still need to improve their knowledge on different subjects in order to perform better when they are already in the academe. The result affirms the findings of Aguinaldo (2006) where he found that student-teachersare at the "satisfactory" level in terms of competence. Further, it is parallel to the result of the study conducted by Anduyan (2003) where he revealed that the student-teachers of Isabela State University System, in terms of having a comprehensive grasp in the subject they teach, is at "moderate" level.

1.1.3.Conclusions

1. The emotional intelligence of the student-teachers in terms of emotional literacy, emotional quotient competencies and emotional quotient values and attitudes revealed "vulnerable" results.
2. The level of mathematical competency in the field of elementary algebra, intermediate algebra, advanced algebra, geometry, trigonometry and statistics was"satisfactory".

1.1.4. Implication

1. The development of emotional intelligence among students must be embedded in the curriculum at all levels.
2. Selective retention and admission policies must be implemented by Teacher Education Institutions to ensure the quality of student-teacher.
3. Remedial classes in Mathematics must be given to those who were identified to have a low level of competence.

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