The Multiple Intelligences of College Students with Different Majors

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ABSTRACT

This study is conducted based on a questionnaire concerning multiple intelligences. The subjects of this study are 657 students from twelve departments in nine universities in Taiwan, including the Departments of Chinese Literature, Foreign Languages, Business Administration, Law, Accounting, Finance, Social Work, Nursing, Mathematics, Information Engineering, Electrical Engineering and Physics. In terms of statistical analysis, there are two independent variables, including students' gender and department; and eight dependent variables, such as verbal-linguistic intelligence, logical-mathematical intelligence, spatial intelligence, musical intelligence, bodily-kinesthetic intelligence, interpersonal intelligence, intrapersonal intelligence, and naturalist intelligence. Two-Way MANOVA as well as Two-Way ANOVA are utilized as the research methodology in this study. The results of this study indicate obvious differences lie in the multiple intelligences between two genders. Females have a better performance on interpersonal intelligence while males are better at bodily-kinesthetic intelligence, spatial intelligence, and naturalist intelligence. In addition, the differences also exist in different departments that students come from. Students from the Departments of Foreign Languages, Accounting, and Nursing have better performance than the ones from the Departments of Information Engineering on interpersonal intelligence. Students from the Departments of Chinese Literature, Financing as well as Social Work have better performance than the ones from Department of Mathematics and Information Engineering on intrapersonal intelligence. In terms of verbal linguistics, students from the Departments of Chinese Literature and Law have the best performance, and the ones from the Departments of Mathematics and Financing have the weakest strength. Students from the Departments of Mathematics, Physics, and Electrical Engineering have the highest logical-mathematical intelligence, while the ones from the Departments of Chinese Literature and Foreign Languages have the weakest performance. Surprisingly, the result of this study also indicates that students from the Departments of Nursing have equal performance among these eight intelligences. As a result, educators will succeed in assisting learners to develop well-rounded intelligences so long as the former understands and applies appropriate measures to balance the strength as well as the weakness of the latter intelligence.

Keywords : college students, departments, multiple intelligences

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REFERENCES

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Albero, P., Brown, A., Eliason, S., & Wind, J. (1997). Improving reading through the use of multiple intelligences. (ERIC Document Reproduction Service No. ED 410522) Armstrong, T. (1987). In their own way: Discovering and encouraging your child's personal learning style. New York: Tarcher/Putnam. Armstrong, T. (1994). Multiple Intelligences: Seven ways to approach curriculum. Educational Leadership, 52(3), 26-28. Armstrong, T. (1999). 7 kinds of smart: Identifying and developing your many intelligences. New York: Dutton/Plum, 304. Armstrong, T. (2000). Multiple intelligences in the classroom (2nded.).Alexandria, VA: Association for Supervision and Curriculum Development. Carson, D. (1995). Diversity in classroom: MI and mathematical problem-solving. (Doctoral dissertation, University of Alabama, 1995). Dissertation Abstracts International, 57(02), 0611A. Cattell, R. B.(1963). Theory of fluid and crystalliZed intelligence: A critical experiment. Journal of Educational Psychology, 54, 1-22. Chan, David W (2003). Multiple intelligences and perceieved self-efficacy among Chinese secondary school teachers in Hong Kong. Educational Psychology 23(5), 521-533. Dare, M., Durand, S., Moeller, L., & Washington, M. (1997). Using multiple intelligences, cooperative learning, and higher order thinking skills to improve the behavior of at-risk students. (ERIC Documents Reproduction Service No. ED411954). Ellingson, W. E., Long, E. A.,& McCullough, K. L.(1997).Improving Student Motivation through the Use of Varied Instructional and Curriculum Adaptation. Master's Action Research Project, Saint Xavier University and IRT/Skylight Field-Based Master's Program. (ERIC Document Reproduction Service No.ED 412006). Gardner, H. (1983). Frames of Mind : The Theory of Multiple Intelligences. New York: Basic Books. Gardner, H.(1997). Multiple Intelligence as a partner in school improvement. Educational Leadership, 55(1), 20-22. Gardner, H (1999). Intelligence Reframed: Multiple Intelligence for the 21st Century. Basic Books. Garvey, M. (1984). An assessment of learning styles among pharmacy students. American Journal of Pharmaceutical Education, 48(2), 134-140. Gens, P., Provance, J., VanDuyne, K., & Zimmerman, K.(1998). The effects of integrating a multiple intelligences based language arts curriculum on reading comprehension of first and second grade students. (ERIC Document Reproduction Service No. ED 420840) Greenhawk, J. (1997). Multiple intelligences meet standards. Educational Leadership, 55(1), 62-64. Guilford, J. P. (1959). Three faces of intellect model. In B. B. Wolman (Ed.). Handbook of intelligence: Theories, measurements and applications. New York: Wiley. Jeft, M. (2000). Mathematics-Study & Teaching: Multiple intelligences. Mathematics Teaching in the Middle School, 6(3), 150. Layng, D. (1995). Improving behavior through multiple intelligences. Master's Research Project, Saint Xavier University and IRT/Skylight.(ERIC Document Reproduction Service No. ED 392550). Lindvall, R. (1995). Addressing multiple intelligences and learning styles: Creating active learning. ERIC Document Reproduction Service No. ED 388397 Lubinski , D., & Benbow, C. P. (1992). Gender differences in abilities and preferences among the gifted: Implications for the math-science pipeline. Current Directions in Psychological Science, 1, 61-66. Mallonee, R. L. (1997). Applying multiple intelligence theory in the music classroom. ERIC Document Reproduction Service No. ED 411240 Mayer, R. E. (1992). Thinking, problem solving, cognition. (2nd ed.). NY: W.H. Freeman and Company. Mettetal, G., Jordan, C. & Harper, S. (1997). Attitudes Twoard a Multiple Intelligences Curriculum. The Journal of Education Research, 91(2),115-122. O'brian, P. & Burnett, P. C. (2000). Counselling children using a multiple intelligences framework. British Journal of Guidance & Counselling,28(3),353-371. Pierce, M. (1997). Improving elementary students' motivation. ERIC Document Reproduction Service No. ED 412002 Spearman, C. (1904)"General intelligence" objectively determined and measured. American Journal of Psychology, 15, 201-293. Sternberg, R. J. (Ed.) (1985). Beyond IQ : A triarchic theory of intelligence. New York: Cambridge University Press. Terman, L. M. (1925). Genetic studies of genius (Vol.1): nental and physical traits of a thousand gifted children. Stanford, CA: Stanford University Press. Thurstone, L. L. (1938). Primary mental abilities (Psychometiric Monograghs No.1). Chicago: University of Chicago Press. Trina, H., & Michelle, N. (1999). Improving academic achievement in reading and writing in primary grades. (ERIC Document Reproduction Service No. ED

438518) Wechsler, E. L. (1958). The measurement and appraisal of adult intelligence. Baltimore: Williams & Wilkins.