PISA, KTSP AND UN

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The purpose of this article is to discuss the relationship among PISA, KTSP and UN on the subject of mathematics at the level of Junior high school in Indonesia. In order to do that, a qualitative research was conducted. PISA stands for Programme for International Student Assessment. It is an international comparative study for 15 years old students in mathematics literacy, reading and science literacy managed by the OECD, a group of industrialized countries. PISA defines mathematical literacy as an individual's "capacity to identify and understand the role that mathematics plays in the world, to make well-founded judgments, and to engage in mathematics in ways that meet the needs of that individual's current and future life as a constructive, concerned and reflective citizen." The concept of mathematical literacy is closely related to several other concepts discussed in mathematics education such as mathematisation or mathematical modeling. Up to year 2009, 65 countries are members of this group. In the last PISA that was tested in 2009, results of Indonesian students on mathematics were ranked 61. Meanwhile, KTSP stands for Educational National Curriculum or the ideal curriculum has been designed by the center government since 2006. We found a big gap between the contents curriculum with the problems were tested in the PISA mathematics. Using document analysis method, we analyzed each item of mathematics problem and we compared with the curriculum content at the standard. Furthermore, we also analyzed the items of mathematics problems in the National Exam (UN). We found some math problems were different with PISA. Most of the problems at the UN were in the level low and middle of PISA. Therefore, we offer suggestions that we have to include some PISA-type problems in next UN so that students and teachers will aware of the problems and these will automatically guide students to learn PISA problems. To conclude, we recommended two main suggestions, first, some mathematical topics and competences that have to be inserted in the KTSP and to socialize PISA problems to both students by doing competition and mathematics teachers by workshop on designing PISA-like problems as well as how to use them in the classroom at the junior high school level.

Keywords: PISA, KTSP, UN, PISA-like problems, mathematics literacy.

References

- [1] OECD (2010a). PISA 2009 Results: Vols. I V. OECD. http://www.oecd.org/document/61/0,3746,en_32252351_32235731_46567613_1_1_1_1, 00.html Accessed 17/01/2011.
- [2] OECD (2006). Assessing scientific, reading and mathematical literacy: A framework for PISA 2006. OECD.

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