PROFIL MODEL MENTAL SISWA KELAS X SMA NEGERI 2 KUTA TENTANG MATERI IKATAN ION DAN KOVALEN

Oleh

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ABSTRAK

Penelitian ini bertujuan mendeskripsikan dan menjelaskan profil model mental siswa SMA Kelas X SMA Negeri 2 Kuta tentang ikatan ion dan kovalen. Penelitian ini menggunakan metode survei dengan teknik analisis deskriptif dan melibatkan 46 orang siswa sebagai sumber data. Pengumpulan data dilakukan dengan pemberian tes dua tingkat. Analisis data dilaksanakan secara deskriptif melibatkan hubungan antara jawaban siswa dan argumentasinya dengan melibatkan tiga level kimia. Hasil penelitian menunjukkan profil model mental siswa kelas X tentang ikatan ion dan kovalen adalah 8,94% tergolong model mental ilmiah dan 91,06% model mental alternatif, yang terdiri atas 90,58% model mental benar sebagian dan 0,48% mengalami miskonsepsi khusus. Berdasarkan hasil temuan tersebut, sebagian besar siswa belum memiliki model mental yang utuh untuk memahami materi ikatan ion dan kovalen. Dengan demikian, rendahnya model mental ilmiah siswa menuntut guru agar melakukan remidiasi, khususnya pada pemahaman level submikroskopis agar siswa mampu membangun model mentalnya secara utuh.

Kata-kata kunci: model mental, tes dua tingkat, ikatan ion dan kovalen

THE PROFILE OF STUDENTS' MENTAL MODELS GRADE 10TH IN SMA NEGERI 2 KUTA ABOUT IONIC AND COVALENT BONDING

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ABSTRACT

This research was aimed to describe and explain the profile of students' mental model grade 10th in SMA Negeri 2 Kuta about ionic and covalent bonding. This research was used survey method with descriptive analysis technique on grade 10th in SMA Negeri 2 Kuta that involve 46 students. The data were collected through diagnostic test two tier. Data analysis was conducted descriptively that involved the corelation between student's answer and student's argument by using three level of chemistry. The result of this research showed that the profile of student's mental models grade 10th about ionic and covalent bonding were 8.94% of scientifically mental models and 91.06% of alternative mental models, consist of 90.58% mental models of partially correct type and 0.48% of spesific misconception type. Based with that research, most students don't yet have a complete mental model for understanding ionic and covalent bonding. Therefore, the low scientific mental model of students requires teachers to do remediation, especially at the understanding of submicroscopic level so that students are able to build their mental model as a whole.

Key words: mental model, diagnostic test, ionic and covalent bonding