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Preservice Science Teachers' Understanding of Equitable Assessment

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Abstract: Learning is dependent on cognitive and physical differences as well as other differences such as ethnicity, language, and culture. Furthermore, these differences also influence how students show their learning. Assessment is an integral part of learning and teaching process and is essential for effective instruction. In order to provide effective instruction, teachers need to provide equal assessment opportunities for all students to see their learning difficulties and use them to modify instruction to aid learning. Successful assessment practices are dependent upon the knowledge and value of teachers. Therefore, in order to use assessment to assess and support diverse students learning, preservice and inservice teachers should hold an appropriate understanding of equitable assessment. In order to prepare teachers to help them support diverse student learning, as a first step, this study aims to explore how preservice teachers' understand equitable assessment. 105 preservice science teachers studying at teacher preparation program in a large university located at Eastern part of Turkey participated in the current study. A questionnaire, preservice teachers' reflection papers and interviews served as data sources for this study. All collected data qualitatively analyzed to develop themes that illustrate preservice science teachers' understanding of equitable assessment. Results of the study showed that preservice teachers mostly emphasized fairness including fairness in grading and fairness in asking questions not out of covered concepts for equitable assessment. However, most of preservice teachers do not show an understanding of equity for providing equal opportunities for all students to display their understanding of related content. For some preservice teachers providing different opportunities (providing extra time for non-native speaking students) for some students seems to be unfair for other students and therefore, these kinds of refinements do not need to be used. The results of the study illustrated that preservice science teachers mostly understand equitable assessment as fairness and less highlight the role of using equitable assessment to support all student learning, which is more important in order to improve students' achievement of science. Therefore, we recommend that more opportunities should be provided for preservice teachers engage in a more broad understanding of equitable assessment and learn how to use equitable assessment practices to aid and support all students learning trough classroom assessment.

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