

## Development of Assessment Instruments The Learning Process Chemistry Based Scientific Approach to High School Students

<b>Title</b>	Development of Assessment Instruments The Learning Process Chemistry Based Scientific Approach to High School Students
<b>Author Order</b>	3 of 3
<b>Accreditation</b>	3
<b>Abstract</b>	<p>Instrument based assessment of the scientific approach is very important learning process developed to measure scientific students. The instrument is said to be good and true if valid criteria, the reliability, practical, and effective. This research aimed to know the instrument character, to get a valid and reliability instrument, to examine instrument practicality, and to test the instrument effectiveness level in measuring students scientific learning process. This research used a qualitative and quantitative and adapted the method of research and development Borg and Gall models. The content validity of the instrument was validated by experts. Assessment instruments were tested at 30 students (limited) and 100 students (broad). The validity of the instrument items were analyzed with the program SPSS 16.0 version and obtained which represented 20 items every scientific learning indicators. Reliability were analyzed with the SPSS program 16.0 version and obtained the reliability by value 0.908 (very high). The validity of the assessment instruments constructs were analyzed by using LISREL program 8.8. version and model compatibility fulfilled a good of fit criteria with the grade of value (0.6159), RMSEA (0.000), RMR (0.061), CFI (1.00), NFI (0.98), GFI (0.97), AGFI (0.93), NNFI (0.98), PNFI (0.74), and PGFI (0.81). The results of the value calculation of construct reliability was 0.95 and variance extracted value was to 0.54. Assessment instruments had practicality and effectiveness level with "very good" category based on the user's response.</p>
<b>Publisher Name</b>	Universitas Negeri Semarang
<b>Publish Date</b>	2020-03-31
<b>Publish Year</b>	2020
<b>Doi</b>	DOI: 10.15294/jere.v9i1.30361
<b>Citation</b>	
<b>Source</b>	Journal of Research and Educational Research Evaluation
<b>Source Issue</b>	Vol 9 No 1 (2020)
<b>Source Page</b>	31-39
<b>Url</b>	<a href="https://journal.unnes.ac.id/sju/index.php/jere/article/view/30361/17052">https://journal.unnes.ac.id/sju/index.php/jere/article/view/30361/17052</a>
<b>Author</b>	Dr. KARTONO, S.H., M.H