Model development history for *Teacher Conceptions of Assessment* (TCoA-III).

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| Model | Description | Model fit | Issues |
| 1 | Original NZ TCoA-III | *k*=27; ꭓ2=585.034; *df*=311; RMSEA=.080; CFI=.829; gamma=.87; SRMR=.082; AIC=719.034 | * Sub-factors under *Improvement* (i.e., Education, Teaching, and Learning) and *Irrelevance* (i.e., Inaccurate) have negative error variances. * COA09 and COA18 had very low factor loadings, .27 and -.01; Both under sub-factor Inaccurate. * MI>20; e3 (COA03) had significant covariance with e7 (COA04) |
| 2 | COA18, COA09, and sub-factor Inaccurate were removed. | *k*=25; ꭓ2=480.919; *df*=263; RMSEA=.077; CFI= .858; gamma=.89; SRMR=.072; AIC=604.919 | * Sub-factors under *Improvement* (i.e., Education, Teaching, and Learning) have negative error variances. * MI>20; e3 (COA03) and e7 (COA04) had a significant covariance. |
| 3 | COA03 and sub-factors Teaching, Education, and Learning were removed | *k*=24; ꭓ2=423.491; *df*=243; RMSEA=.074; CFI= .870; gamma=.90; SRMR=.071; AIC=540.994 | * Sub-factor Validity had a negative error variance. * MI>10; e5 (COA05) had significant covariances with e16 (COA10) and e7 (COA04). * MI>10; e26 (COA08) had significant covariances with e21 (COA16) and e12 (COA06), and significant regressions to COA16 and COA06 |
| 4 | COA08 and sub-factors Validity, Ignored, and Irrelevant were removed | *k*=23; ꭓ2=371.804; *df*=223; RMSEA=.069; CFI= .889; gamma=.92; SRMR=.067; AIC=477.804 | * MI>10; e5 (COA05) had a significant covariances with e16 (COA10) and e7 (COA04). * MI>10; e8 (COA22) had a significant covariance with e22 (COA27) and a significant regression weight into the same item. * MI>10; e10 (COA15) had a significant covariance with e16 (COA10); e9 (COA13) and e6 (COA14). |
| 5 | COA05, COA22, COA13, and COA15 were removed | *k*=19; ꭓ2=225.030; *df*=146; RMSEA=.062; CFI= .923; gamma=.94; SRMR=.063; AIC=313.030 | * Model fit acceptable. |

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| Item | Description |
| COA03 | 3. Assessment is a way to determine how much students have learned from teaching. |
| COA05 | 5. Assessment is integrated with teaching practice. |
| COA08 | 8. Teachers conduct assessments but make little use of the results. |
| COA09 | 9. Assessment results should be treated cautiously because of measurement error. |
| COA13 | 13. Assessment feeds back to students their learning needs. |
| COA15 | 15. Assessment results are consistent. |
| COA18 | 18. Teachers should take into account the error and imprecision in all assessment. |
| COA22 | 22. Assessment helps students improve their learning. |

Model development history for *Practice of Assessment Inventory* (PRAI)

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| Model | Description | Model fit | Issues |
| 1 | Original Hong Kong with 33 items | *k*=33; ꭓ2=957.699; *df*=490; RMSEA=.083; CFI=.616; gamma=.83; SRMR=.094; AIC=1099.699 | * Based on the regression weights, items PRAI29, PRAI09, and PRAI08 were not statistically significant and have very low factor loadings, .06, .01, and .12, respectively. * MI>40; e9 (PRAI32) had a significant covariance with e10 (PRAI30) * MI>20; PRAI3032 had a significant regression to PRAI30 |
| 2 | PRAI29, PRAI09, PRAI08, and PRAI32 were removed | *k*=29; ꭓ2=661.547; *df*=372; RMSEA=.075; CFI=.713; gamma=.87; SRMR=.088; AIC=787.547 | * MI>10; e21 (PRAI03) had significant covariances with e6 (PRAI04), e18 (PRAI27), and e32 (PRAI12) * MI>10; e31 (PRAI22) had significant covariances with e25 (PRAI31), e11 (PRAI1), and e2 (PRAI14) and significant regressions to PRAI31, PRAI16, and PRAI14. |
| 3 | PRAI03 and PRAI22 were removed | *k*=27; ꭓ2=512.180; *df*=319; RMSEA=.066; CFI=.771; gamma=.91; SRMR=.083; AIC=630.180 | * MI>10; e19 (PRAI02) had a significant covariance with e15 (PRAI01) and significant regressions from PRAI01 and PRAI24. * MI>10; e7 (PRAI18) had a significant covariance with e37 (Irrelevance) |
| 4 | PRAI02 and PRAI18 were removed | *k*=25; ꭓ2=387.294; *df*=270; RMSEA=.056; CFI=.836; gamma=.94; SRMR=.075; AIC=497.294 | * MI>10; e33 (PRAI26) had significant covariances with e28 (PRAI19), e25 (PRAI31), e16 (PRAI23), and e6 (PRAI04), also a significant regression to PRAI31, PRAI04, and PRAI23. * MI>10; e3 (PRAI17) had significant covariances with e38 (Examination) and e30 (PRAI15), also significant regression to PRAI15. * MI>5; e10 (PRAI30) had significant covariances with e17 (PRAI07) and e5 (PRAI05), and significant regressions to PRAI28 and PRAI07 * MI>5; e4 (PRAI05) had a significant covariance and regression to e25 (PRAI31) |
| 5 | PRAI26, PRAI17, PRAI05, and PRAI30 were removed | *k*=21; ꭓ2=233.043; *df*=184; RMSEA=.044; CFI=.911; gamma=.97; SRMR=.071; AIC=327.043 | * Model had an acceptable fit. |

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| Item | Description |
| PRAI02 | 2. Assigning a grade or a mark is a significant part of my routine practice in assessing student work. |
| PRAI03 | 3. I use assessment to determine how much students have learnt from teaching. |
| PRAI05 | 5. I re-teach because students get poor assessment results. |
| PRAI08 | 8. I teach differently in classes that have no pressure from public examinations. |
| PRAI09 | 9. The assessment results have little impact on my teaching. |
| PRAI17 | 17. I ask questions in class mainly to check students’ understanding. |
| PRAI18 | 18. On discussing any inconsistency in students’ assessment results, I will review their exam papers |
| PRAI22 | 22. My students always do supplementary exercises by publishers to prepare for tests and examinations. |
| PRAI26 | 26. The priority of my work is to help students to pass their examinations. |
| PRAI29 | 29. I rely on the test and examination results more than other means to judge student performance. |
| PRAI30 | 30. I use alternative assessment together to assess different student abilities. |
| PRAI32 | 32. I use alternative assessment together with tests and examinations in the assessment process. |

Model development history for *Conceptions and Practices*

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| Model | Description | Model fit | Issues |
| 1 | All TCoA-III factors to the PRAI general factor | *k*=40; ꭓ2=1095.921; *df*=725; RMSEA=.061; CFI=.803; gamma=.88; SRMR=.085; AIC=1285.921 | * All regression paths from TCoA-III factors to Practices of Assessment were not statistically significant. * Factor PRAI Improvement had a negative error variance. |
| 2 | Regression paths were created from one TCoA-III factor to all PRAI factors, and the non-significant paths were deleted one by one. | *k*=40; ꭓ2=1070.646; *df*=724; RMSEA=.059; CFI=.816; gamma=.89; SRMR=.094; AIC=1262.646 | * Five significant regression paths were discovered. * MI>10; e33 (COA04) had significant covariances with e23 (PRAI12) and e12 (PRAI23), also significant regression to PRAI12. |
| 3 | Regression paths were created from TCoA-III equivalent factors to PRAI | *k*=40; ꭓ2=1057.596; *df*=724; RMSEA=.058; CFI=.823; gamma=.89; SRMR=.079; AIC=1249.596 | * Five significant regression paths were discovered. * PRAI12 had a significant regression to COA04 |
| 4 | One regression path was added: TCoA-III Student accountability to PRAI Irrelevance | *k*=40; ꭓ2=1051.549; *df*=723; RMSEA=.057; CFI=.825; gamma=.89; SRMR=.078; AIC=1245.549 | * Six significant regression paths were discovered * MI>20; PRAI12 had a significant regression to COA04 * MI>10; e33 (COA04) had significant covariances with e12 (PRAI23) and e23 (PRAI12) |
| 5 | Based on model 5, COA04 was removed | *k*=39; ꭓ2=973.963; *df*=685; RMSEA=.055; CFI=.837; gamma=.90; SRMR=.078; AIC=1163.963 | * Six significant regression paths were discovered * Model had an acceptable fit. |

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| Item | Description |
| COA04 | 4. Assessment provides feedback to students about their performance. |