

3 Test Creation

The validity of an assessment depends in part on there being a good fit between what is taught and what is tested. This means that teachers choose curriculum strand and curriculum level appropriate to the teaching programme they implement. The selection of strands in each subject differs slightly.

3.1 Customised test

This is a test which is customised by the user. The process allows you to go through and select the test duration, curriculum level, curriculum strands and how you want to administer the test (onscreen vs. paper).

3.2 Comprehensive test

This is a pre-built test which covers all strands. As the comprehensive test is pre-built, it will contain the same set of questions every time a user generates it. The test is comprised of multi-choice questions only and can be delivered onscreen, on paper, or both. In the case of paper delivery, an Answer Sheet is also provided for students to record their answers on.

There may be circumstances when a user or school leader wishes to administer one test that covers all aspects of the curriculum to many students. All strands of the curriculum functions are covered, thus providing a snapshot to evaluate the learning needs of students in all curriculum areas. As the scores on this comprehensive test are on the same underlying scale as all other e-asTTle tests in the Curricula area, then they can be used for growth comparisons, and for all Reports within e-asTTle.

Many have raised issues with the cost of producing test booklets that are used only once by students. As it is critical to tailor every test to the teaching program, e-asTTle still allows such customised tests (which can be administered pencil and paper or on-screen, the latter reducing the need for paper). When testing larger groups, however, the e-asTTle Comprehensive Test can be printed (and reused) and only the answer sheets (which can be printed separately as part of the e-asTTle application) need to be produced for each student.

There is one comprehensive test aimed at Year 6 about to enter Year 7 level and one for Year 8 students entering Year 9 level in both Reading and Mathematics.

3.3 Adaptive test

The Adaptive Test is a new concept in e-asTTle. The primary difference between an adaptive test and a customised or comprehensive test is that e-asTTle adjusts the difficulty of the questions in the test, while the student sits the test on-screen, based on the student's responses to a subset of questions.

3.3.1 *What is an Adaptive Test?*

A computer adaptive test adjusts to the student's performance while the student is sitting the test. In order to do this, the test is divided into **stages** and can only be sat on-screen. The teacher selects the difficulty level of the first stage. When the student has completed this stage, e-asTTle selects the difficulty of the next stage based on the student performance in the first stage. For example, if a student performs well on a set of intermediate-level questions, e-asTTle will present a set of questions at a more advanced level. If the student

does not perform very well on the first set, e-asTTle will select an easier set of questions. Thus, two students sitting the same test at the same time may get different sets of questions. (See the Adaptive Test Flow below).

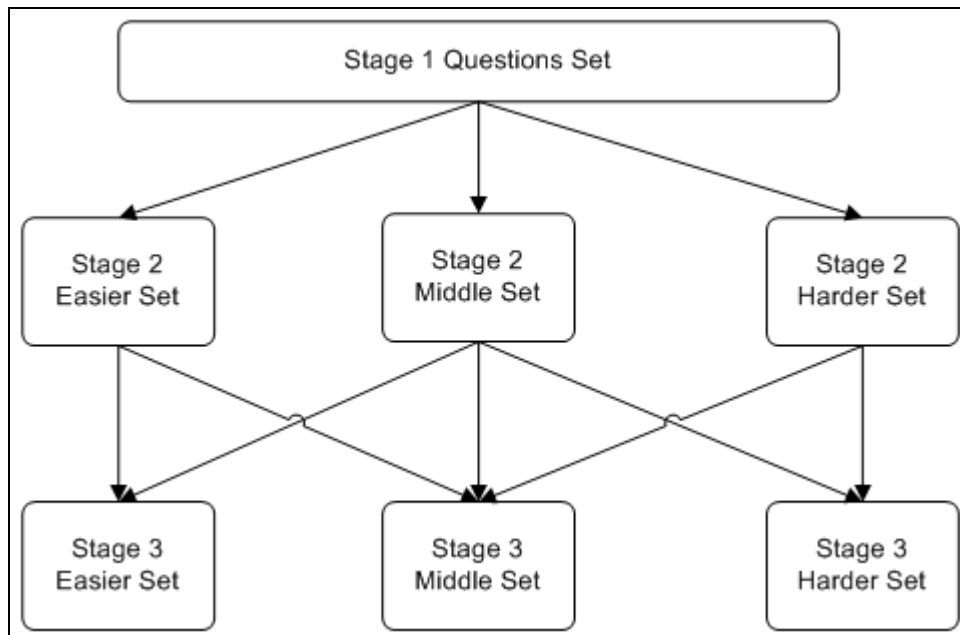


Figure 4. Adaptive Test Flow

3.3.2 Advantages of using an Adaptive Test

- Adaptive tests lead to more accurate assessment, as brighter students do not need to complete easy questions, and lower achieving students don't need to complete overly difficult questions.
- As each student is potentially administered a different set of test items, test security is enhanced.
- As each test is tailored to the student's ability, the accuracy can be enhanced when choosing an Adaptive test.

3.3.3 When would you use an Adaptive Test?

- To get an accurate overall picture of level of ability for individual students in your class (particularly if you have a wide spread of ability in your class).
- When you have a wide range of ability in your class but would like to set the same curriculum parameters for all students.

3.4 Copy existing test

A user can create a copy of an existing test with the same set of questions. By administering a copied test, you will be able to keep the reports on the original and copy tests separate. So, you could administer the original test and the copy test to the same group, or different groups of students and compare the reports.

3.4.1 Why would you copy a test?

It is important to consider why teachers would re-administer an asTTle test and what the implications that may result from doing so. Teachers should remember that because each of

the items in the item bank are on the same scale, so results from two different tests are directly comparable.

If for some reason, there are valid reasons for re-administering a test, e.g., administer to another group of students (see below for more) then in order to ensure that valid interpretations are made, a copy of the test should be taken. This will ensure that all the results will be kept separate. If the two tests are administered within a 3 month period, the teacher can still run reports using both test results, so they would not lose functionality by taking a copy of the test.

3.4.2 When would you copy a test?

A user should copy an existing test and administer the copy, instead of the original, if they wanted to:

- Re-use a test which they created and administered last year, for a *new* group of students.
- Re-use a test, but 3 months or more after you originally assigned the test to the *same* group of students.
- Use a test created by someone else and wanted to keep the results separate.

3.5 Create similar test

A user can create a new test with the same settings, i.e. subject, duration, curriculum level, curriculum strand and delivery method, as an existing test. The set of test questions should be different.

This is a useful way of creating another test using the same settings as a previous test you have administered.