edexcel

Examiners' Report/ Principal Examiner Feedback

Summer 2014

Pearson Edexcel GCE in Applied ICT (6957) Paper 01 Using Database Software

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2014
Publications Code UA040215

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:
http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx

General Comments

It is apparent that a lot of candidates are taking on board comments made in previous reports with regards to marks that are lost because of poor screenshots with the majority ensuring screenshots were clear. However, there are still some who either crop screenshots too much – missing off names of tables, numbers of records on datasheets, truncating macro screenshots etc, and of printing them out too small or with poor print quality making the evidence illegible.

In terms of what is deemed acceptable with regards to help and assistance before and during the exam period. The teacher's job is to prepare the candidates for the exam by developing the **technical skills** necessary to create a database at this level. The scenario is released prior to the examination. Teachers are allowed and encouraged to discuss with their students possible answers to the questions. The scenario had very clear tasks in order to aid this process. At this point the teacher does not know the final construction of the dataset so that any datasets they give to their students for practice can only be guesswork.

Once the teacher becomes aware of what is in the live data files they should no longer discuss the examination in context although they are allowed to discuss with the students aspects of databases in general terms.

For example they can revise the generation of primary keys as long as the examination data files are not used as an example. The data file(s) in any examination contain data that the candidates have to accept as being the way we want it. It is up to them how they cope with any anomalies that may be present. This is true of any 'live' situation in the real world where they would have to make their own decisions about how to proceed. Candidates are not required to create any new fields, they should use all and only what they have been given.

Administration

On the whole administration is sound but there are still some candidates losing one or two standard ways of working marks in the paper by not assembling the tasks in the correct order or, where they are in the correct order, attaching them to the answer booklet incorrectly. When the examiner opens the booklet they should be greeted with activity 1 facing toward them ready to mark; this is not always the case ie when the examiner opens the booklet they are faced with the back of the activity 6 or

the work hole punched in the right-hand corner as opposed to left. This adds to the time taken to mark an examination paper. Very few candidates do not ensure their name, centre number etc is present on every print though it does still occur.

Activity 1

It was expected that this question would be well answered and it was pleasing to see that, in many instances, it was.

Part A required the **identification** of whether a particular action was an input, output, generated or required validation. This was well answered on the whole.

Part B was well answered in many cases too. However, at times students gave answers that were too general and did not really relate them to the design, build or testing stages of the lifecycle.

Activity 2

On the whole this question was well answered which was particularly pleasing to see.

The majority of candidates recognised the need for a student, character and production job table. It was also nice to see the extra data provided in the question was well incorporated with the inclusion of the production table.

With regards to 'assignments' candidates who had clearly studied the scenario and data files carefully did best here. The scenario clearly leaned toward a six table solution mentioning all six within it. On top of the four mentioned above storing the 'character assignment' was discussed as was storing the 'job assignment'. The inclusion of the two data files AssignedCharacters and AssignedJobs were another clear indicator as both had suitable primary keys within. At times it would appear that candidates were trying to force a three or four table solution when the fields they included in each should have really indicated they were not sensible. At times candidates ignored the instruction given to use **all and only** the fields given or did not enforce referential integrity when it came to their relationships meaning marks were lost.

The majority of candidates were able to select appropriate data types though it is still surprising how many cannot and leave all fields as text.

Quite a lot achieved full marks in the validation section which was nice to see. However, some are still applying validation inappropriately. Applying a presence check to a primary key is not appropriate. We also expect limit to list to be set to yes for any combo boxes that have been used. Candidates should also be able to identify a range check from the scenario. Some candidates did not include a heading to say what type of validation they were showing. We not only want to test whether they can apply validation, we want to know if they know what type of validation they are applying. If this was the case then the evidence was marked in the order of the question – some candidates did not achieve marks.

Most candidates achieved the four marks for the single primary key tables though some missed out the actor job from the production job table. Candidates had to study the data files very carefully to ensure all the data was included. The marks for the assignment tables were not always achieved for reasons outlined above.

Activity 3

All candidates attempted this activity which was pleasing to see.
However, it is still worth noting that activity 3 is really all about the **design view** aspects of building the forms and generating the processes. Unless candidates have been asked for screenshots of forms in form view then all screenshots are going to be from a design perspective. Quite a few candidates included far too much evidence that was not really of any use ie the system working and what happens when they complete the forms etc. Activity 4 is designed to test the system and show it working so we do not need to see any evidence of it working in this activity unless specifically requested. This is all about building the system. It is also worth noting that standard ways of working should be adhered to in terms of naming objects rather than the acceptance of default names eg Combo1, Text15 etc. It is very hard for examiners to award marks when the name of the object is vague as it could be referring to anything.
At other times candidates did not include enough evidence which will become apparent from the comments given:

Most candidates built the form that would allow the user to add a new student and it was nice to see how many had made a real effort with regards to customisation. Some very user friendly forms were seen. Most had attempted to generate the StudentID and the majority did it very well. A number of different methods were seen and any that generated automatically and worked were given the marks. Where marks were lost here it was generally because the formula was truncated, the generation was

not shown at all, +1 was missing or students had put the forename before the surname.

It was surprising that not everyone achieved the marks for pointing out one of the features they had included and how it made the form easier to use. It can only be assumed the question was not read carefully as it was clear to see students had customised the form and generally very well.

The saving method for this form was generally well documented and it was pleasing to see how many different methods were put forward for this. Some had chosen to use an append query and call this in the macro. Others had generated the key field on the form and used Set Value to copy it into the primary key. This was generally used in conjunction with the save command. Others had generated the key using a query and built the form around this query. Others used code. Where marks were lost here it was generally because the query had been truncated. It is worth noting we must see every aspect of the query. Many candidates did show which fields would be appended to but had truncated where the data was being picked up from. Others had generated the key on the form but had missed out the Set Value etc from the macro code. The examiners need to be confident a successful save would take place before they will award marks for the save process itself.

The majority of candidates evidenced checking the student name, level of study and date of birth was present and displayed the save message. Some students had chosen to add presence checks in activity 2. This is fine but examiners would need to see evidence of this in activity 3 too to be able to award marks.

It was pleasing to see how well candidates coped with the inclusion of the specific design for the assignment of jobs. Nearly all followed the instructions and ensured the form appeared as it was shown – though some did not and chose to build a form that looked entirely different. The scenario and paper clearly stated that one form was to be used. This meant one form only – not subforms some candidates ignored that instruction and included subforms which were not required.

There was some very good evidence put forward for character assignment section. Quite a lot of candidates filtered to only show the characters still needing actors and actors without a job. However, many did not build gender into the filter. Gender was present in both the student and character tables and was there to test how candidates would cope with the potential for a wildcard ie the inclusion of ‘either’ in the character table. It was nice to

see the many different methods used by those who did include this.

There was also some very good evidence put forward for the other section. Most candidates did filter to show only students who were not actors and many did ensure it was filtered to the production job selected.

Enabling/disabling fields was specifically included for the first time and the majority of candidates gained the marks for this. This was done in a number of different ways for example within code or macros.

Most candidates attempted the saving aspect of this form. If they had attempted it then they usually achieved some of the marks. Where marks were lost it was generally because the queries had been truncated. Again, we must see every aspect of the query and we must also see it being used in the macro or code.

Overall, it was really, really nice to see how well this activity was attempted and the many different methods of achieving what was required. The only downside really is that some candidates still do not realise that if they want the marks on offer they must ensure the examiner can clearly see the evidence. It is worthwhile asking themselves the question – *'if I did not know how this had been done, would I be able to work it out from the screenshots I have provided?'* - This does not mean lots of annotations/screenshots have to be present. Indeed, we try to guide the candidates into the screenshots we want. However, if what we have asked for does not fully show what they have done they should include more. The top and bottom of it is it means have I included all of my queries, have I included evidence of every part of formulae used, are my query columns wide enough, are my screenshots clear to see etc.

Activity 4

Overall, the candidates did well on this activity with many achieving full marks.

For part a where marks were lost it tended to be because the candidates had not shown the tables asked for.

For parts b and c the candidates were given specific screen prints that were to be included though some lost marks as they did not. Candidates who had successfully got the form working in activity 3 tended to pick up most of the marks in these sections which is as it should be. Marks only tended to be lost due to incorrect filtering in activity 3.

Activity 5

Most candidates gained one of the two marks for the query required with many achieving both.

If a mark was lost it tended to be that the instruction to name the generated field as 'NumberLeft' was not followed or they had placed the criteria in the wrong place.

With regards to the report itself, there were many instances of very good, well customised, well presented reports with candidates achieving all of the marks available. However, it is clear some candidates do not fully understand grouping. The question in the paper will identify how many levels of grouping are required. In this instance it was clear only one was required as the paper only mentioned one. Where there is a group it is expected this will contain the labels from the 'many side' of the relationship in the group header. Many candidates included the correct fields in the group header but chose to put the 'many side' labels in the detail section or in the page header or elsewhere.

The majority of candidates were able to ensure the two calculations were present and correct.

Many candidates are still not achieving the 'format' mark. The report has to look presentable, it has to have spaces between the labels, good use of white space, a good title, good use of orientation where appropriate etc.

Activity 6

It was very nice to see that the majority of candidates had taken note of what was asked of them in the examination paper and carefully ensured their evaluation reflected this with some excellent, well thought evaluations raising some very good points about future functionality and better use of the level of study. However, others still see it as an opportunity to talk about how well they have completed the examination questions or give a running commentary of what they did to build it. Please stress to candidates that we do not want to see screenshots of how they have built their database. We have already seen that in activity 3 and candidates can waste a lot of valuable time for doing this and they can end up just describing what has been done rather than evaluating it.

This evaluation was split into distinct aspect:

- How well the student form met the criteria
- How well the form design given met Vicky's needs
- How well the form helped the candidate as a programmer
- Improvements they would make to this form
- How the level of study could be better incorporated

It was nice to see that most candidates read what was required carefully and ensured they did as asked. A lot of evaluations gained mark band three which was really nice to see.

Mark band 1 evaluations tended to ignore some of the aspects eg perhaps did not discuss how the form met Vicky's needs or missed out how it helped them as a programmer. They also tended to be brief and describe what they had done or how they had performed as a candidate. Some discussed all the activities from 1 to 5. They did not tend to be evaluative.

Mark band 2 evaluations usually did address all aspects and were evaluative in part and descriptive in part.

Mark band 3 work was fully evaluative with some very good suggestions for improvements to the job assignment form and for incorporating the level of study.

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE