Principal Examiners Feedback

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Applied GCE
6957 01 – Using Database Software

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Unit 7: Using Database Software (6957)

General Comments

It was pleasing to see that the majority of candidates took into account the clear instructions in the examination paper with regards to the ordering of evidence and the printouts required. It is understandable that some candidates may need to produce more than the minimum prints required in activity 3 but the best advice, as shown by many candidates, is keep to the task and keep it simple. Some candidates are providing far too much evidence.

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 (possibly photocopied). This makes the evidence illegible.

It is worthwhile reiterating here 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 this scenario with their students. For example they can revise the generation of primary keys

Centres are reminded that they must adhere to all items listed in the Instructions for the Conduct of the Examination (ICE) document, available on the Edexcel website. In particular, they should note the following point:

7.8 Secure data files are released to centres earlier than the examination window to enable centres to load them onto the secure workspace and for no other purpose.

The data file(s) in any examination contain data that the candidates must accept as intended. It is up to the candidate to decide 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.

Administration

On the whole, administration is sound but there are still some candidates unable to access marks for Standard Ways of Working 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 i.e when the examiner opens the booklet they are faced with the back of the activity 6. Very few candidates do not ensure their name, centre number and candidate number is present on every print though it does still occur. In a very few instances the candidate details were handwritten on each answer sheet which is not acceptable.

Activity 1

It was nice to see the majority of candidates attempting both sections of this activity. Candidates did answer both sections very well with the majority achieving full marks.

There were very few instances of candidates ticking more than one answer at the same time. Those who did were not awarded the relevant marks.

Most candidates ensured the activity fit onto one sheet of A4 paper.

There was the deliberate inclusion of a second candidate key in the data files, i.e. the passport number. It was hoped candidates would comment on this in the evaluation.

Activity 2

On the whole, this question was well answered and it was particularly pleasing to see the majority of candidates had read the examination paper and only provided the evidence requested. This is good practice and candidates are to be commended for it.

However, there were some who did not, submitting far too much evidence or evidence in the incorrect order.

Candidates tended to do very well in the A section marks with many achieving all 7. This was particularly pleasing as this is the first examination for a number of series that has included a composite key. However, some chose to introduce a new key whilst some chose to use only three tables, at times, removing all evidence of student visit choices.

Candidates are not expected to have to introduce any new fields into the examination papers and should use what has been given only. Some candidates are unable to access the relationship marks purely because they do not ensure referential integrity is enforced.

Quite a few candidates did not achieve the B1 mark, which was awarded for a minimum of three correct data types i.e. one Date/Time, one Yes/No and one Currency. Quite a lot of candidates did not recognise any yes/no fields at all. What was pleasing was that most candidates did achieve the B2 mark for

the correct primary keys in the three simple tables. Quite a lot did achieve B3, i.e. the composite key.

The validation section was attempted well on the whole. However, candidates need to take into account that the examination papers ask for **suitable** validation.

Where keys are generated etc it is deemed unsuitable to use input masks, set them to be required etc as:
 a) there is no input they are generated and
 b) primary keys are required by default.

 Some candidates still do not realise an input mask is the evidence required for a format check.

Quite a lot of candidates chose to use a range check on the payment amount. In this examination paper this was unsuitable as the scenario clearly specified payments could only be either 100 or 400.

Candidates are also still losing marks for list checks/table lookups. We are expecting to see the design view aspect of these and not the user view. We must be able to see that 'limit to list' has been set to yes to award the mark. If candidates show user view this cannot be determined.

With regards to section D candidates generally did well and seem to have grasped an understanding of what is needed. Centres seem to have prepared candidates better to evidence this though there were still some candidates who are cropping off the number of records present in the table. The marks for this aspect of the question can only be awarded if the examiner can clearly see what table it is and the total number of records present.

Activity 3

All candidates attempted this activity, which was pleasing to see. On the whole, it would appear the centres that have taken the time to use the Principal Examiner examination solutions from the website as revision did well, as these really do show the type and quantity of evidence that is expected.

It is worth noting that activity 3 is really all about the **design view** aspects of building the forms and generating the processes. Candidates are specifically told what screenshots should be design view and what screenshots should be form view. Quite a few candidates included far too much evidence that was not really of any use i.e. 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 that in this activity. This is all about building the system. The majority of marks in this section are awarded for the design.

At other times candidates did not include enough evidence which will become apparent from the comments given.

Section A required the candidates to create a Sign Up form. Most candidates had attempted the entire section.

Most candidates attempted (ii) and did very well. There were numerous different calculations used of varying complexity. Some chose to generate the key on the form, others used queries, some used code and others mixed and matched. Where marks tended to be lost here it was because the field was truncated, meaning not all of the calculation could be seen or candidates had missed showing the query if one had been used.

It was pleasing to see that many candidates could customise a form well and that the marks awarded for this are being gained by most. It is now usual to see the use of a good title, fully customised layout including good labels, field widths and appropriate field order etc. Where marks were lost in this section, it tended to be where candidates had not used asterisks to show where data entry was required and/or greyed out generated fields to show data input was not necessary. In this paper, one mark was awarded for either of those two.

Most candidates achieved some of the marks in the B section which was very nice to see and the evidence is getting better. Many used macros and queries and many used code. Either was acceptable so long as the evidence could be clearly seen. Where marks were lost in this section it tended to be because candidates truncated the macro evidence or there were problems verifying append queries used.

With regards to append queries we are expecting to see each and every field that will be appended in full. We also expect to see that query being called in the macro/code.

With regards to macro evidence we are expecting to see conditions and actions etc. Some candidates choose not to show actions and show the comments column (earlier versions of Access). This is not evidence that an action would work. The rows can be made deeper in these earlier versions of Access and the columns wider.

Candidates should really be encouraged to use these facilities. Examiners need to be able to see the **conditions, actions** and **arguments** clearly and in full. Others chose not to show the macros at all and presented evidence of the system apparently working. Examiners do not want to see screenshots of the system in action here that comes into activity 4. With regards to clearing the form the examiner must be sure it would clear.

Section C was well attempted with good evidence put forward on the whole. Again, there were numerous different methods candidates used and it was nice to see the variety. Most attempted the query that was asked for. It should be noted checking FullyPaid was no was only acceptable if the field was in the correct table ie the student table. Most candidates bypassed this method and used a Sum function on the Payment Amount to do the same job. It was hoped they would realise FullyPaid was not particularly required

due to being able to generate the same information and hold that thought until the evaluation. The generation of the new balance etc was, on the whole, very well addressed.

With regards to Section D, it was nice to see a lot of candidates realise the save process for a valid payment required two main actions ie saving the payment details and the need to update the FullyPaid field to yes where required. However, the evidence was sketchy at times. For example, examiners could see two queries had been built (one append, one update) but only one was used in the macro. Candidates were given credit separately for each successful action.

On the whole where marks were lost it was for the same problems encountered in the A section ie truncation of calculations, not showing how things were generated, not including the queries etc.

Section E was very well evidenced by some candidates, especially the check to see how many students were already going on the trip. But some candidates did lose marks here. The examiner had to clearly see where and how the check was determined. For example, some candidates chose to include a subform built from a query. This would have been fine if the examiner could actually see the field on the subform. Others chose to use queries and refer to them in their macro/code – yet failed to include the query etc.

On the whole there was some excellent evidence put forward for this entire activity.

Activity 4

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

Where marks were lost it tended to be either misspelling the details they were given, misspelling the same details only for them to be 'perfectly' stored or where candidates had clearly fabricated the evidence. It is worth nothing that marks for the messages appearing were only awarded if the save itself was correct.

Activity 5

Most candidates who had managed their time well got onto this activity and managed to complete it.

It is worth noting that if candidates are specifically asked to carry out a calculation in a query then that is where the marks will be awarded for it. Some chose to ignore the instructions and generate the calculations on the report itself.

It was surprising that quite a lot of candidates appeared to find this activity harder than the reports in some of the most recent examinations where grouping etc was required. No grouping at all was necessary in this report. Candidates were tested on their ability to recognise that the information given would need to actually appear on all Payment Reminders.

For example, some lost marks for only including '*Berrymill Secondary School – Paris Trip*' and other specified content in the report or page header. The report header was inappropriate as this would only actually appear at the top of the first page. The page header was inappropriate as it would only appear at the top of each page etc.

Many lost marks because they did not copy the content give ie spelling mistakes etc.

It was pleasing to see that candidates did make a good attempt at formatting the report. However, some did not check their data carefully enough for **presentation** i.e. checking for truncation of labels or fields etc and some did not take into account they were asked to ensure there were four reminders per page.

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. 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. To reiterate the first part of the evaluation should see the candidates evaluate how well their database carries out the tasks from the scenario and they should evaluate this through the eyes of the user and how the system has been made easy to use for them. The second should see them discuss further functionality. Please stress to candidates that we do not want to see screenshots of how they have built aspects. We have already seen that in activity 3 and candidates can waste a lot of valuable time doing this.

It is worth nothing the examination databases are clearly specified as prototypes. There are always going to be things wrong with them and we do expect the mark band three level candidates to be able to pick up on some of these when they discuss further functionality.

For example in this particular database:

- the second candidate key in the student table. Could that mean no StudentID needs to be generated.
- the problems with payments ie why allow only payments of £100 or £400? The fact that no check is done to see if they overpay etc.
- not really needing fully paid as can see whether they have fully paid from summing the payments made

- the problems with visits eg nothing to stop the same student picking a trip they have already picked, not needing to store the second day visit as can be determined from the first, not ensuring only students who have not picked a trip are displayed to choose from etc
- the above are only a few

It was pleasing to see that many did choose to use the second part of the evaluation to clearly show they knew exactly what the limitations were. There was some very good reasoning and suggestions for improvements.

Examples of the three mark bands are shown:

Mark Band 1
I did not get all of activity 3 done because I could not do the save bit. I tried and tried but could not get it to work. I did do well in activity 1 and 2 I think because I managed to get the relationships and I think I was good at the validation.

Mark band one because it is all about their own performance not evaluating the database at all.

Mark Band 2
I have a sign up and students fill in their details. The StudentID is generated for them and uses letters from their last name and a number. The form has a save button and when that is clicked it checks to see if they have entered their details and, if they have, it saves them straight into the student table**. So I have met this requirement and Charles does not have to actually do very much other than type in the details and click save. I think he will be happy with it.**

Mark band two because it is very descriptive and not really evaluative apart from what is highlighted in bold. Also in this mark band we find a lot misidentify the user of the system. Charles was the user, not the students.

Mark Band 3
There was a need for a Sign Up form. I wanted this to be very easy for Charles to use. **I made sure he knew what he needed to type in because I clearly told him on the form and included red asterisks. These are common things used on the likes of websites and people are used to seeing them and knowing what they are for so I think both would be very useful to him**. I also grouped the address details etc together. **I think this would have made the form easier to use because the layout was logical. For example, it makes sense that Charles would expect the county after the town**. I also tried to limit data entry wherever possible for him and I had default values in the town and county**. I am sure Charles will be pleased with those at it saves him having to keep typing in Berrymill and County Durham over and over again. On the same note the automatic generation of the StudentID will definitely save Charles a lot of time and effort. If that was not there he would have to work out the three letters from the surname himself – that bit is not that hard to do, then go into the**

student table and work out what the highest number is to be able to add one on to it – now that is hard.

This is fully evaluative. As you can see we don't need to know how they have done something as we have seen that in activity 3, we want to know what they think of what they have done with regards to how it makes the system easier to use for the user(s). As previously mentioned, good candidates can see the weaknesses in the prototype and can take them forward into the second section where they have to make recommendations for further functionality.

Grade Boundaries

Centres are reminded that the GCE in Applied ICT is an Awarded qualification. As such, grade boundaries are subject to review each series for both written paper and coursework units.

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