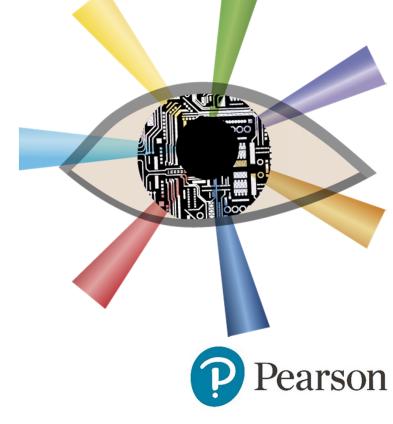
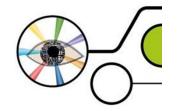
# **BTEC Nationals in IT**

Planning for externally assessed unit 1 and unit 2 and feedback on previous series.

**Event Code: 18BVN04** 



# Aims for the day

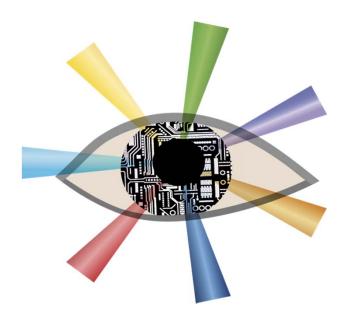


- Consider teaching, learning & assessment approaches and share practice within the externally assessed units
- Receive feedback from the previous external assessment series
- Consider learner responses to specific questions and/or tasks
- Share practice in planning for externally assessed units
- Identify common issues
- Have the opportunity to ask questions
- Have the opportunity to network

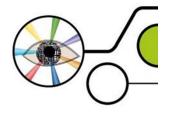


# BTEC Nationals in Computing

Unit 1 – Information Technology Systems



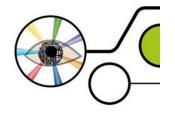




#### **Exam Structure**

- 2 hour written exam
- 90 marks
- 4 scenario with several questions about each scenario
- Questions have a range of marks each
  - 4 marks up to 12 marks

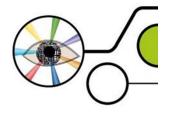




#### Overall feedback

- Some improvement over previous series
- However some issues remain
  - Failure to read the question properly
  - Failure to check the number of marks available
  - Poor responses to long answer questions with lack of detailed knowledge





#### **Question 1a**

- 4 mark question
- Review the mark scheme
- Decide on a mark for the leaner response in the delegate booklet.



#### Unit 1



#### **Question 1c**

- This question was answered very poorly.
- Review to question
  - Why do you think learners did poorly on this question?
  - How can you help them prepare for questions like this?



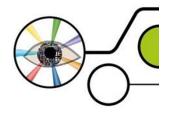
#### Unit 1



#### **Question 1d**

- This is an 8 mark question
- Levels based mark scheme
- Review the question, mark scheme and example learner response
- Decide on a mark band for this response

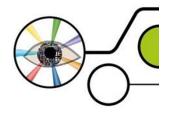




# Question 2a(i)

- This is question was answered well by many candidates
- Review the question, mark scheme and example learner response
- Decide on a mark band for this response

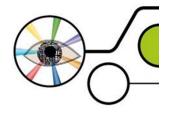




#### **Question 2b**

- 6 mark question, with a levels based mark scheme
- This question proved challenging for many learners
- Question is about file permissions but learners confused access rights with file permissions
- Review mark scheme and learner response
- Why do you think this proved challenging?
- How can you help learners prepare?





#### **Question 3a**

- Learners ask to draw a diagram
- Majority of learners were in the bottom mark band for this question
- Working in groups, attempt the question
- Mark your attempt
- Discuss possible reasons for poor performance





#### **Question 4b**

- 12 mark question
- Many learners achieved band 2
- High bands were not achieved as leaners failed to relate answers to the context
- Review mark scheme and sample answer

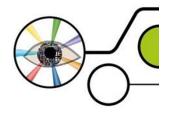




# Teaching approaches

- Ensure full coverage of the unit content
- Use available materials
  - SAM and additional SAM
  - Sample marked exam
  - Past papers
  - Examiner reports

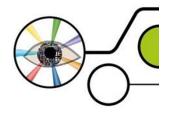




# Teaching approaches

- Answer individual exam questions in class
  - Timed to match the question
  - Review answers after each question
- Revision quizzes using Kahoot or other resources
- Use of techniques such as mind maps to prepare for long question and help provide structure





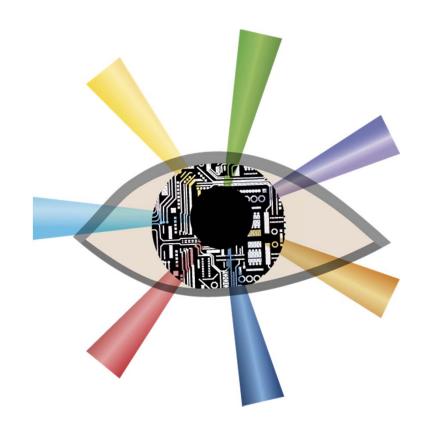
# Summary

- Learners need to:
  - Read the question carefully to
    - ensure they fully understand what is being asked
    - identify the command verb
  - where the question asks for two methods/reasons ensure that two responses are given
  - where a question asks for a description/explanation look at the marks that can be gained to indicate the number of points that should be made
  - produce responses in a structured manner, particularly in extended questions



BTEC Nationals in Computing
Unit 2: Creating
Systems to
Manage

Information



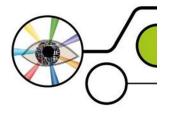




#### **New structure**

- This and future exams are in a new format
- What the learners need to do remains the same
- The way they provide evidence has changed
- Changes are based on centre feedback
- Reduces the amount of design evidence needed.

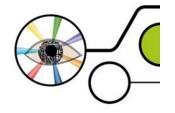




#### **New structure**

- 10 hours over a 1 week period
  - Activity 1 ERD
  - Activity 2 Table structures and validation
  - Activity 3 Interface and functionality
  - Activity 4 Testing
  - Activity 5 Evaluate solution

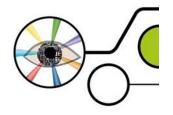




#### Overall feedback

- Learner responded well to the new format of the exam.
- However some are still not well prepared for all the required tasks
- Weakest areas are validation and the test plan
- Grade boundaries:
  - Pass 19
  - Merit 29
  - Distinction 40





# **Activity 1 - ERD**

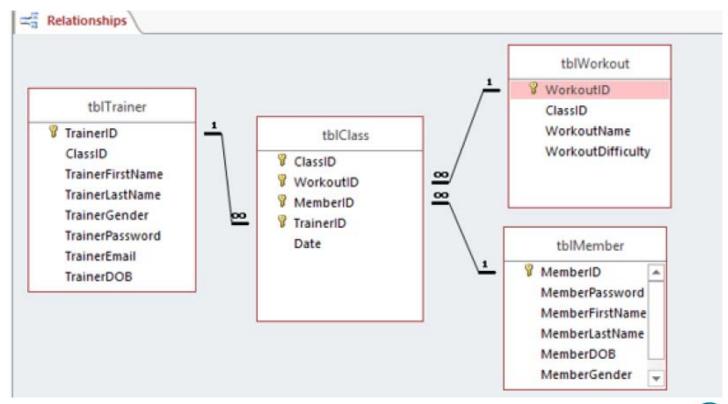
- Screen print of the relationship design
- Show tables, fields and relationships
- Learners should use all and only the attributes included in the data file
- Learners should ensure all fields in each table can be seen



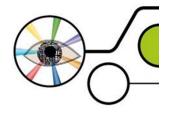


#### **ERD**

 Review mark scheme, decide on mark band for this example







# Activity 2 - Table structures and validation

- Candidates must use the provided template
- Field names and datatypes were mostly correct.
- Validation
  - Presence, length, range and lookup checks, all done well
  - Table look up of foreign key values on the primary key table, omitted by some learners
  - Format checks also done incorrectly by some learners

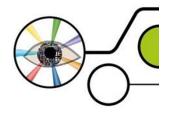




# **Activity 2 - validation**

- Remind learners about table look up validation
- Foreign key values MUST exist as the primary key on another table
- Therefore using a table look to select the values from the linked table is an obvious way to ensure they are valid
- Access makes this easy.

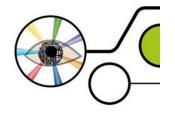




# Activity 3 – Interface and functionality

- Screen prints of the forms, queries and report
- Must use the template provided
- Annotations are NOT required

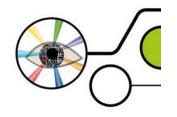




# Activity 3 – Interface and functionality

- Forms
  - Marks lost because forms were not fit for purpose
  - Marks lost because no automation macros or code were provided
  - Example:
    - The scenario asked for 'an input form for a member to register themselves for a class.'
    - The form (next slide) is typical of those produced by weaker learners



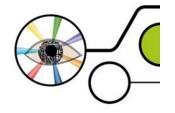


# Activity 4 - Interface and functionality

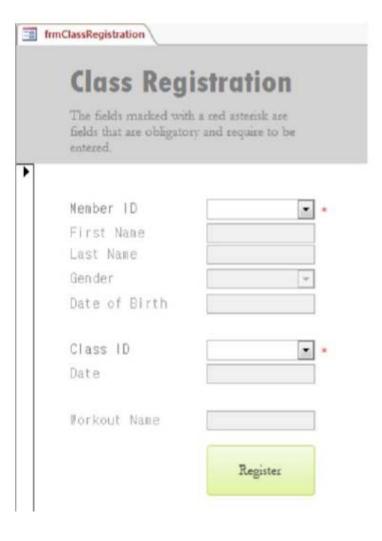
• Forms – is this fit for purpose?

frmMember	
<u>Member Form</u>	
MemberID MemberPassword MemberFirstName MemberLastName MemberDOB MemberGender MemberEmail	NUGgxDqf Sandra Tucker 07/11/1981 Female  Sandra.Tucker@gpost.com

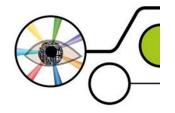




Activity 4 – Interface and functionality







# Activity 3 – Interface and functionality

```
Private Sub btnSaveRegistration Click()
                                                                                                    Tra
'Ensures that field is not Null and data has to be present'
If IsNull([MemberID]) And IsNull([ClassID]) Then
MsgBox "Please fill in the required fields"
Else
If DCount ("MemberID", "qryRegisterCheckStatus") > 0 Then
'If a person attempts to register to a class more than once, a message box will be displayed'
MsgBox "You have registered to this class before!"
    ElseIf DCount("MemberID", "gryNumberOfMembersPerClass") < 18 Then
    'This notifies the user that their application to a class has succeeded and will open a new form'
      DoCmd.Save
      DoCmd.GoToRecord , , acNewRec
   MsgBox "You have registered to this class successfully!"
    'Notifies a user that their registration has been successful'
   Else
    'There has already been 18 people registered for the class, therefore a message will be shown
   MsgBox "There is already sufficient members registered to this class."
End If
End If
End Sub
```



#### Unit 2



- Activity 3 Interface and functionality
- Queries
  - Queries were done well by many learners
  - Weaknesses:
    - Both design and datasheet view should be shown
    - Criteria truncated
    - Generated fields using default names
    - Poor parameter input messages

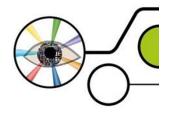




# Activity 4 – Testing

- Testing is only required for the two input forms.
- This was one of the weaker activities.
- Main issues were:
  - Too few tests
  - Tests not relevant to the scenario
  - Test data was not suitable or vague
  - Expected results were not accurate based on the test data given
  - Test data was missing
  - Tests did not make sense





# Activity 4 – Testing

- Review mark scheme and lead examiner's sample test plan
- See delegate booklet

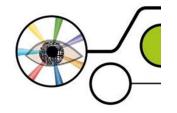




#### Task 5 - Evaluation

- Requirements are:
  - Understanding of technical concepts
  - Justification of:
    - changes made
    - Database structure chosen
    - Quality, performance and usability of the solution
  - Links between scenario and solution
  - Accurate technical language

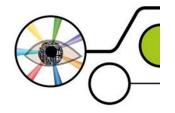




#### Task 5 - Evaluation

- Weaker learners tended to either:
  - discussing technical concepts and how their solutions fits
  - OR
  - discussing scenario and how their solution fits
- Band 1 evaluations were purely descriptive
- Band 3 and 4 evaluations combined the two approaches and included some evaluative comments





#### Task 5 - evaluation

- Review the mark scheme for Task 5
- Decide on a mark band for the evaluation in the delegate booklet

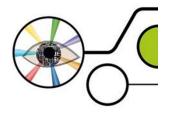




# Summary

- Learners should:
  - Use the templates provided
  - Ensure important information is not cropped off their screen shots
  - Not waste time with annotations
  - Develop a better understanding of validation and testing
  - Improving form layout and automation



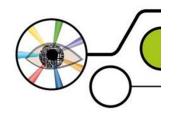


# Teaching approaches

- Use available materials
  - SAM and additional SAM
  - Sample marked exam
  - Past papers
- Practice sections of the exam



# Step-by-step support available online, by phone or in person







# Review aims for the day



- Consider teaching, learning & assessment approaches and share practice within the externally assessed units
- Receive feedback from the previous external assessment series
- Consider learner responses to specific questions and/or tasks
- Share practice in planning for externally assessed units
- Identify common issues
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Please complete the evaluation form included in your pack before you leave today.

You will also be emailed a link to the evaluation form after the event today if you haven't had time to complete it.
You can also access it here:

https://goo.gl/forms/LpgJNfahSKN8Z7Ln2

**THANK YOU!** 



