

3134-20 Level 2 Technical Certificate in Working in Dental Settings

2019

Qualification Report

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Introduction

This document has been prepared by the Chief Examiner and Principal Moderator; it is designed to be used as a feedback tool for centres in order to enhance teaching and preparation for assessment. It is advised that this document is referred to when planning delivery and when preparing candidates for City & Guilds Technical assessments.

This report provides general commentary on candidate performance in both the synoptic assignment and theory exam. It highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat assessments in the 2018 academic year. It will explain aspects which caused difficulty and potentially why the difficulties arose.

The document provides commentary on the following assessments;

- 3134-520 Level 2 Dental settings Theory exam
 - March 2019 (Spring)
 - May 2019 (Summer)
- 3134-021 Level 2 Dental settings Synoptic Assignment

Qualification Grade Distribution

The grade distribution for this qualification is shown below;



Please note City & Guilds will only report qualification grades for candidates who have achieved all of the required assessment components, including Employer Involvement, optional units and any other centre assessed components as indicated within the Qualification Handbook. The grade distribution shown above could include performance from previous years.

Theory Exam

Grade Boundaries

Assessment: 3134-520 Series: March 2019 (Spring)

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	60
Pass mark	27
Merit mark	35
Distinction mark	43

The graph below shows the distributions of grades and pass rate for this assessment;



Assessment: 3134-520 Series: May 2019 (Summer)

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	60
Pass mark	26
Merit mark	34
Distinction mark	42

The graph below shows the distributions of grades and pass rate for this assessment;



Chief Examiner Commentary

3134-520 Level 2 Dental settings - Theory exam

Series 1 – March 2019

Overall, candidates performed well with this paper, they demonstrated good breadth of knowledge and some depth of understanding across most of the paper. Candidates were generally able to achieve higher marks for questions that carried more marks.

Candidates demonstrated a good level of knowledge and understanding in the following topic areas:

- Safe handling of chemicals
- Consequences of non-compliance
- Reporting and recording safeguarding concerns
- Instruments used in dental treatments

On the topic area 'risks associated with the handling of waste in dental settings', candidates demonstrated good knowledge and understanding of what clinical waste is, however, included some inaccurate procedures. In addition, some confusion was shown with processing solutions being classed as clinical waste and not special waste. Areas of safeguarding in some areas also proved to be a strength of many candidates however, reasoning for a disclosure and barring service overall was weak with candidates not having an understanding of what a disclosure and barring service is or used for.

Candidates who were unable to achieve marks across the paper with questions that held lower marks were able to specifically pick up marks for the question relating to instruments used for a restorative procedure. This demonstrates candidates' confidence in this area.

A limited level of knowledge and understanding was displayed in the following areas:

- Tooth morphology.
- Infection control requirements and legislation related to cleaning equipment.
- Information sharing and confidentiality.

The answers given for tooth morphology was overall weak across many of the candidates. There was limited knowledge of the number of roots for each tooth, some candidates did not answer this question and others guessed resulting in a loss of significant marks. With regards to the performance on the topic of information sharing and confidentiality, candidates stated within their responses sharing information that is not allowed however, few candidates did answer this question correctly.

Overall candidates demonstrated a good depth of knowledge being able to identify specific recall of knowledge, however breadth of knowledge seemed to lack in some areas preventing candidates from gaining higher overall marks. Exam techniques used overall seems to have improved since last year's sitting with candidates breaking the questions down where possible. However, some candidates misread particular questions resulting in no marks being awarded, for example, one question read "impact on the practice" and candidates' answers indicated for the impact on the individual, therefore marks were not awarded.

Extended response question

There were varied responses across the extended response question with marks achieved across bands 1 to 3. An area of strength was where candidates highlighted the need to put the

patient's best interest first; many related this to the GDC standards and provided expansion but not all. Many candidates were also able to identify the risks involved with clinical waste although failed to expand. Some candidates did not provide considerations of how clinical waste should be handled safely. However, some related the risks associated with the waste to relevant legislation and were able to gain the higher marks in bands.

Some but not all candidates considered the banding of the treatment however, did not focus on the main aspects of the scenario, which was on patient care, clinical waste and the treatment itself. Only a few candidates where able to relate their answers with considerations for the treatment received by the patient. Responses were generally limited to patient care with considerations taken for the patient's age. Where candidates demonstrated further breadth and provided accurate and relevant explanations, they achieved marks within bands 2 and 3.

Series 2 – May 2019

Overall, candidates performed well with this paper, they demonstrated good breadth of knowledge, being able to identify specific pieces of knowledge and some depth of understanding across most of the paper. However, depth of knowledge seemed to lack in some areas preventing candidates from gaining higher marks overall. Exam techniques used seemed to be positive with the majority of candidates reading the questions thoroughly.

Candidates demonstrated a good level of knowledge and understanding in the following topic areas:

- Know instruments and materials used for dental treatments.
- Understand the fire safety procedures.
- Know the causes and transmission of infection.
- Understand the role and responsibilities of the dental team in relation to safeguarding in the work environment.

On the topic area of 'Understand the fire safety procedures' candidates demonstrated good knowledge and understanding of what action should be taken whilst also taking in to account the GDC standard "putting the patients best interest first". However, candidates failed to mention calling the emergency services in the event of a fire.

Candidates who were unable to achieve marks consistently across the paper with questions that held lower marks, were able to specifically gain marks for the questions relating to dental instruments and materials, this demonstrates candidates' confidence in this topic area. The topic area 'Understand the role and responsibilities of the dental team in relation to safeguarding in the work environment' was another area of strength for the majority of candidates with good breadth of knowledge shown.

Candidates proved to have a good level of knowledge in the topic area of 'know the causes and transmission of cross infection', which is a fundamental part of the Dental Nursing role and candidates were able to gain higher marks in this area.

A limited level of knowledge and understanding was displayed by some candidates in the following areas:

- Know the causes and transmission of infection
- Decontaminate/sterilise dental instruments, equipment and materials
- Know how regulations and regulatory bodies impact on members of the dental team
- Know tooth morphology and methods of dental charting

The responses given for non-pathogenic micro-organisms was poor across many of the candidates.

There was limited knowledge shown, with some candidates not providing an answer to this question and others guessing. In the topic area 'Decontaminate/sterilise dental instruments, equipment and materials', the majority of candidates were not able to identify the difference between the specified dental equipment, resulting in marks gained being minimal. Knowledge around the topic area 'Know how regulations and regulatory bodies impact on members of the dental team' also proved to be a poor area for the majority of candidates, with some candidates guessing with their answers resulting in very few marks being awarded in this area.

Finally, 'Know tooth morphology and methods of dental charting' proved to be a challenging topic for candidates. This particular topic area carried higher marks, however, candidates failed to utilise this.

A poor response was provided especially when identifying the surfaces of the teeth and whether treatment is required or present.

Extended Response Question

There was a variation of responses across the Extended Response Question with marks achieved across bands 1 to 3. An area of strength was where candidates highlighted the need to put the 'patient's best interest first', many related this to the GDC standards and provided expansion but not all.

Many candidates were also able to identify the risks involved with decontamination, although failed to expand on this. Some candidates did not provide considerations of how instruments should be transported and handled safely. However, some related the risks associated with the process to relevant legislation and guidelines as well as being able to identify the possible routes of infection.

Some but not all candidates were able to identify equipment used during the decontamination process and their uses, although others did not expand on this. Responses were generally limited to the process and health and safety. Where candidates demonstrated further breadth of knowledge and provided accurate and relevant explanations, they achieved marks within bands 2 and 3.

Overall, candidates structured their answers well having read the question in full and were able to break down their responses.

Synoptic Assignment

Grade Boundaries

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Assessment: 3134-021 Series: 2019

Total marks available	60
Pass mark	23
Merit mark	32
Distinction mark	41

The graph below shows the distributions of grades and pass rate for this assessment;



Principal Moderator Commentary

Overall, candidates showed sound fundamental knowledge of dental settings, and a pleasing standard was reached by candidates from all centres. However, it is important for candidates to read the questions carefully and stay on topic. In order to maximise marks, candidates should try and use the full word count on the Evidence Recording form to record detail, as it is their opportunity to showcase their knowledge.

In Tasks 1 and 2 candidates should have assumed the patient/parent had minimal dental knowledge. Higher scoring candidates gave consideration to what the question was asking, and were confident to give specific, in-depth information, relevant to the task. Also, when completing their task Evaluation form they asked "why" when making a statement. For example, in Task 2 candidates should avoid the use of jargon when engaging with the parent, but on the Evaluation form they can add technical detail i.e. the science behind what they had said. E.g. "spit don't rinse" - because if you rinse after brushing you are washing away the fluoride toothpaste that has just been applied to the teeth. This means that you are not giving the fluoride time to soak into the enamel and strengthen it against an acid attack, which can then cause tooth decay.

In Task 2 we wanted the candidate to think about the benefits of the long-term oral health of the child as this is a pathway to changing future behaviour. There was some concern that giving the parent/patient the 'wrong message' would be detrimental in the real world. The oral health message should be standardised. Excellent communication is essential when getting the message across to the parent, along with an additional explanation of why you do something - this adheres to the cause and effect principle and enables the parent to remember it.

It is accepted that candidates will be nervous during the practical 'role play', but the Evaluation form allows them the opportunity to write a reflection and clarify any omissions, reflecting on their work is considered good practice. It is a further opportunity for the candidates to add information that felt they had missed, how they should have used this information and stating why it was important. Although all candidates were able to apply some basic knowledge to the scenarios, those that achieved lower marks did not use the Evaluation form to its best effect. Also, they had difficulty providing a link between a knowledge statement and justifying or indicating how or why it should be included in their comments; this was particularly apparent in Task 4 which could take on the appearance of a 'to do' list.

A highlighted weak point was the completion of the clinical notes in Task 1. The idea behind the requirement of completing the clinical notes is so that the next person that accesses these knows what has been carried out and what the patient has decided. If candidates subsequently work in a dental practice, they may be expected to update clinical notes - it should be noted that such information should be legible. These are legal documents that rely on the accurate input of information and they are dated so that they can be relied on later. A minimum requirement would be the date; a short explanation of what has been done or said; consent to a particular treatment plan; any money paid; balance outstanding; and any other information considered appropriate for future reference (e.g. next appointment date). The signed and dated treatment plan should be attached to the clinical notes (and one given to the patient).

Candidates who displayed limited knowledge in AO1 had difficulties with AO2-AO5, which affected their marks overall. Knowledge is paramount in order to perform well across the assessment, and distinction candidates were expected to show a higher standard of answer and consistency across all of the tasks. However, those candidates that performed less well in AO1 had the opportunity to gain marks in AO3 - the practical elements in Tasks 1 and 2 - with good positive communication, and responded well and engaged with the patient/parent.

Although Task 4 initially appeared to focus on first aid, those candidates who gained higher marks considered the additional elements of infection prevention and control, and health and safety. It was necessary for candidates to move away from considering individual topics and consider how various topics interact. Knowledge from a number of units had to be applied in a systematic way; making this link was fundamental to achieving high marks. E.g. in Task 4 when considering the sharps injury, the hazard is likely still present, and there is a risk it could cause a further sharps injury, so the hazard should be disposed of appropriately to prevent it from happening again. A further example is the inclusion of drying of hands before applying a plaster - the hands need to be dry in order for the plaster to stick. The candidate should explore the topic and add practical solutions to the prescriptive elements. Tasks 3 and 4 are not just recall of knowledge, the candidate must explore practical elements, e.g. in Task 4 when assisting their colleague, they should have washed their hands and be wearing clean gloves.

It appeared that all candidates felt comfortable with all tasks as they made an effort to consider the knowledge and practical elements required for the scenarios. Candidates were observant in Task 3, so the content of their explanations proved important when differentiating candidates. All questions worked very well; they allowed candidates to offer a wide range of answers, and showcase their knowledge and its application. This was seen by the spread and depth of evidence. It would seem the standard of teaching on the programme is preparing the candidate well should they subsequently work in dental settings.

Task 1 was a complex scenario that allowed candidates to consider many perspectives. Higher performing candidates would be expected to include and link clinically specific information when considering the two treatment plans as the patient may benefit from certain information when making their decision about future treatment. The candidates may consider discussing the patient's periodontal condition and whether any teeth may be lost in the future and the potential to add to an upper partial denture. Also the potential for a new upper partial denture to include other missing teeth (previously extracted) in the upper arch, which the denture could replace as well as the immediate replacement of the abscessed upper left central incisor. Higher performing candidates considered the information given in the scenario and focused their answer on this rather than offering generalised comments. This task was not just clinically specific; it also required practical skills when completing legal documents and making appointments.

Verbal communication and body language have paid a large part in Tasks 1 and 2. When working in dental settings, staff will encounter patients with specific communication needs. In Task 2, giving consideration to the parent's demeanour was important and the necessity to change their point of view, but being mindful of their emotional fragility. The way candidates conducted themselves would determine how they picked up marks in AO3.

AO1 – Recall of knowledge

Most candidates showed fundamental knowledge across a reasonable breadth of the qualification. The higher scoring candidates gaining additional marks from covering a greater depth of knowledge. Any knowledge inaccuracies subsequently impacted on other Assessment Objectives, particularly the marks achieved for AO2.

AO2 – Understanding of concepts, theories and processes

Some candidates struggled because their knowledge was lacking and thus found it difficult to make necessary appropriate links to practical applications – the cause and effect principle. Strong candidates were able to make these links in various different ways, demonstrating good depth of understanding.

AO3 – Application of practical/technical skills

It would seem candidates were generally attentive with good listening and communication skills. Working in dental settings requires a good standard of communication, and the marks achieved for AO3 demonstrated that candidates, on the whole, displayed these skills. During the conversation with the patient/parent there was often considerable repetition, which often ended in the candidate becoming confused. Overall, most candidates attempted to engage with the

patients and were aware of the need for empathy and reassurance. Although some candidates used the resources provided by the centre to back up the information they were giving to the patient, those with lower marks did not use them to best effect. When considering tooth brushing instruction and learning styles, good demonstration is paramount but not all candidates chose to do this.

AO4 – Bringing it all together

This shows the candidate's depth of knowledge by being able to make links and detail how knowledge can impact on practical elements. Candidates that scored well in AO1 and AO2 also mirrored this in AO4. Detailed steps of logical procedures were important when describing 'dealing with hazards' in Task 3 such as short and long-term solutions, and 'dealing with the casualty' in Task 4.

AO5 – Attending to detail/perfecting

Candidates lost marks on this Assessment Objective if they did not have the knowledge to ensure they had fully covered all elements of the task practically. Attention to detail requires a good understanding of the whole picture so there is not repetition, just reiteration of the salient points for the benefit of the patient/parent, or when answering written scenario questions. This Assessment Objective carries less weight than others towards the overall mark, so became more significant for those candidates aiming for a Distinction grade who displayed the ability to 'sum up' coherently. Candidates who reiterated information and summed up for the patient/parent in Tasks 1 and 2 usually showed factors that influenced AO5 marks. Attending to detail is not about putting irrelevant information in the answer. An example of this is in Task 1 where some candidates discussed the option of placing an amalgam filling in the upper left central incisor. The UK Palmer chart indicates a distal cavity, which almost certainly will be visible when restored, so the dentist is most likely to fill this tooth with a tooth-coloured aesthetic filling e.g. composite. This is stated in the treatment plan option in the clinical notes, so any comments regarding an amalgam were unnecessary as it isn't for the candidate to offer alternatives not offered by the dentist.

Although marks were not awarded for spelling and grammar, those who scored highly had fewer errors, and their sentences flowed as they justified their actions or comments. It was also apparent that they had checked their work before it had been presented for marking. In addition, an audio recording strengthened the assessor's comments about the candidate's delivery. Fundamental errors, which impacted considerably on marking included the time spent on including information that was superfluous.