

Re:View

Keeping excellence in your sights | September 2017 | Issue 31

**Jai Kudo sponsors
ABDO College**

**Profile feature on
Steven Pringle**

We find out about Steven
and his research on childhood
amblyopia

**New optical assistants
course**

**Godmersham Park
features on new £10 note**



A new banknote, a new course, a new sponsor, a new member of staff



The home of ABDO College, Godmersham Park, has been hitting news headlines recently, as it's featured on the new polymer £10 note.

The covering story on page 12 outlines Godmersham Park's connection with Jane Austen, who is also depicted on the new banknote.

In this issue of *Re:View* you will find information on the new level 4 optical

assistants course as well. In addition, there's an article on the MSc programme for dispensing opticians, and useful tips on producing a dissertation.

Modern technology, and how it can be used to treat childhood amblyopia, was the topic for Steven Pringle's dissertation, and you can read about Steven and the findings of his research on pages 6–9.

I'm delighted that Jai Kudo Lenses has become the latest addition to the list of industry partners to sponsor ABDO College; discover more about the company and their decision to support the College on page 2–3.

Finally, I would like to take this opportunity to welcome Steven Roberts to the ABDO College team. In his role of courses coordinator, optical support programmes, Steven will now be the College's main point of contact for WCSM courses, and you can find out more about him in the interview feature on page 13.

Angela McNamee

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Chairman,

ABDO College Board of Trustees

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Dissertation do's and don'ts

If you're coming to the final year of your degree course you will be facing your dissertation. At first, this can feel like an enormous mountain to climb, a daunting piece of work. In fact, all the skills you have learnt throughout years one and two, how to do research and write evidence based essays, has given you the skills that you need to write your dissertation. With some initial planning and on-going persistence, you will find that writing your dissertation is easier than you first thought.

To start, it's never too early to think about the topic for your dissertation. As you study throughout your course, dispense to new patients in practice and browse through journals you are learning more about the wide scope of dispensing optics. All these encounters can spark ideas for your final year dissertation. Jot down a list of ideas on your phone as they come to you, or start a file of research papers, articles and case studies that inspire you.

ABDO College lecturer Stuart Tanner advises, "Primarily, students should choose an area which interests them and is relevant to their own practice, whether it's to investigate a new topic or develop current understanding. It is easier if it begins with a problem or question arising from everyday practice. I'd suggest starting by considering two to three topics that interest you at work and gather peer opinion, work colleagues, public opinion etc. You may stumble upon some contentious issues which need further investigation of the available evidence. You may be trying to answer a question or prove a statement. Sometimes a difference of professional

opinion or a challenge to written material can provide a starting point. Draw mind maps of your initial topics early on with the main theme in the centre and branch other connected areas. This helps link ideas and visualise whether there is enough to write about. Weaker topics can be disregarded at this early stage." Lecturer Haydn Dobby adds, "Allow a lot of time for the planning and research stages."

constantly remind you and be flexible, don't be afraid to develop it as you write."

Work out what you need to do for each part of the paper, and allocate yourself a time to do it. You can't read twenty research papers in a single day without losing concentration, so perhaps plan to read one each evening and one at lunchtime every day for two weeks. Make notes and use highlighters as you go along to aid you when you come to start to write.

Once you are ready to write, start with your method and results. Haydn Dobby suggests, "Writing the introduction at the very end of the process so it fits the assessment perfectly". Stuart Tanner advises, "Be organised. Use 'live' documents which can be accessed from most mobiles to record notes and ideas; most dissertations are submitted electronically nowadays, rather than pen and paper."

'Writing the introduction at the very end of the process so it fits the assessment perfectly.'

Once you have a topic and a focussed research question, make a plan. Importantly, you need to assess right from the start whether you are posing a research question that can be answered. Stuart Tanner says, "Make sure you can answer your question! If the question is too broad then the work will not be focused, too narrow and there will not be enough to write about. Keep the title somewhere that will

Midway through your dissertation many students hit a low point. You are surrounded by research papers – or perhaps you're struggling to find rigorous research at all. You might be having difficulty finding the right words, or have written far too much. Either way, don't give up. If you're struggling to find research, or even considering finding an entirely new research question, talk to your tutor. Often a few pointers can

Jai Kudo sponsors ABDO College

get you going again. Haydn Dobby says, "If you aren't sure of how to approach a larger piece of academic writing like a dissertation or individual study, to seek help asap, either from the College or from the Academic Support and Academic English Service at Canterbury Christ Church University." If you have too much information, print it off, lay it out and prioritise which papers are most important. Often seeing everything printed out in front of you can make things easier. Use highlighter pens to mark out key points.

If you are at the stage of editing your work, highlighter pens can come in handy again. Mark the most important parts of each sentence. The parts that you haven't marked may be padding that can be edited out if you need to cut your word count. By highlighting the most important parts you will make sure that every word counts and will contribute towards your final marks.

Allow a few days towards the end of your process for you to leave your dissertation. Come back to it with fresh eyes and read it through once more to spot typos and errors. This is a good stage to ask a colleague to read it through for you too: a fresh pair of eyes is much better at spotting sentences that don't make sense or spelling mistakes.

Double check the time and date that you need to hand your dissertation in: don't stumble at the final hurdle. Finally, remember to have a celebration when you have handed your dissertation in. It is probably the biggest piece of work that you have done so far. Take time to sit back and tell yourself "Well done!".

From September, students at ABDO College will be learning all things optical in the Jai Kudo Optics lab, thanks to a new sponsorship from the Millmead Optical Group, home to Jai Kudo Lenses. Students will find supporting information for their studies across the classrooms relevant to the functions carried out in each room, learning from the Jai Kudo experience how technologies have been developed.

Group lens director, Paul Clapton, says "Jai Kudo Lenses has a great reputation in the industry. In changing times where we have mergers, acquisitions and globalisation, Jai Kudo remains UK based and independent which gives us synchronicity with ABDO College. We are proud and excited to be supporting the next generation of professionals." When asked about the range's strong points, Paul says, "Jai Kudo holds 1.1 to 1.2 million stock lenses in at any one time,

advanced 3D calculations to mimic the movements of the eye across the lens surface to provide best optics at all points." All Jai Kudo Lenses go through a rigorous process of glazing tests, edging tests, and user trials, highlighting Millmead Optical Group's desire to provide the best products and services.

The business was founded in 1946 in Millmead, near Guildford in Surrey. Chief executive officer, James Conway, says "We started by manufacturing

'Our titanium is shipped from Japan, manufactured, cut and coloured in Italy. The frames have our own patented hinge mechanism.'

an enormous range. We have a product called Honeycomb Mesh which is specifically designed to help reduce eye fatigue and headaches and provide a much sharper level of vision. When you look at our freeform progressive lens range that stands out too as we are incorporating Digital Ray Path technology. The design principles behind this incorporate complex geometry with

temples, exporting them all over the world to countries including America, France and Italy. The business has evolved since then to offer frame ranges, lenses and accessories too." He continues, "Working with ABDO College is a way to incorporate all the things we do at Millmead Optical Group and invest in the future of optics. There are so many students going through

the doors, these people are the opticians of the future. We want to invest in the grass roots of the industry." Considering the way the industry is changing, Paul goes on to say, "We have noticed a reduction in the support mechanisms within the industry at manufacturer level. Across Millmead Optical Group we want to fill the gaps where people can no longer get support. We should be supporting tomorrow's DOs and all professionals, and our sponsorship of ABDO College is just a part of that."

Millmead Optical Group also offers a range of frames. It now manufactures its Walter & Herbert range of frames in Liverpool, where the company also has its head office. James says, "Masterminding the move to manufacturing in Liverpool wasn't without difficulty, we have made a big investment on the frames side but we are reaping the rewards now." There



James Conway, Chief executive officer

are 110 staff in Liverpool, with a further 20 in the design office just outside London. James says, "We will be showcasing two of our eyewear collections, Walter & Herbert and Reykjavik Eyes in the Common Room area of the College. Walter is my grandfather, Herbert is the father of Daniel Thorn, the chairman. Together, they have inspired a range

looked at every aspect, from manufacturer to merchandising to provide a complete package in the Walter & Herbert range." The other range which will be showcased in the ABDO College Common Room is Reykjavik Eyes, an award winning high end technical frame made from titanium. James explains, "Our titanium

'Jai Kudo holds 1.1 to 1.2 million stock lenses in at any one time, an enormous range.'

of modern classic frames with a big nod to our heritage. We use a lot of ideas and techniques from the past with a modern twist for this range combining our knowledge, expertise and heritage. I have samples in our office from all the frames we made in the past. We have

is shipped from Japan, manufactured, cut and coloured in Italy. The frames have our own patented hinge mechanism. We have had to innovate production techniques to make this range as it is hard to use bright colours and titanium. The metal repels many types of lacquer, so we have pushed technical boundaries to avoid colour distortion. We have been selling Reykjavik Eyes for four to five years now, and are very proud that we have achieved such great colours with strong titanium frames."

Summing up why the Millmead Optical Group is backing ABDO College, James says, "Millmead Optical Group is here to genuinely support tomorrow's professional across the board. We have frames, accessories and lenses, we are perfectly positioned to be the number one independent optical solutions provider within Europe, offering a truly rounded range of products with great service."



Paul Clapton, Group lens director

Mastering the next level

Would you like to put the letters MSc after your FBDO BSc (Hons) qualification? Many students leaving ABDO College are considering their next move already, while DOs who have been in practice for a number of years can find new enthusiasm and inspiration from returning to study. The MSc Health and Wellbeing offered at Canterbury Christ Church University (CCCU) is available to dispensing opticians and is designed to be a flexible and responsive course. You will follow some modules alongside a range of health and social care practitioners, while others are tailored specifically to your own interests: you could graduate with a MSc Health and Wellbeing with an endorsement for low vision or contact lenses, for example.

The MSc Health and Wellbeing programme aims to help practitioners develop high quality health and wellbeing services for all ages across the health and social care sector. Through critical analysis of theory, research, policy and legislation you will be supported to advance scholarship and practice. A culture of inter-professional collaboration will be fostered through the provision of opportunities to learn with, from and about others. Knowledge and skills gained could enhance your continuing development, improve your performance at work and benefit the organisations that you work for now and in the future.

You can undertake the programme in stages initially working towards a Postgraduate Certificate then a Postgraduate Diploma, before completing your Masters qualification. If you do not wish to complete the full Masters, you can choose to complete either a

Postgraduate Certificate or Postgraduate Diploma, depending on the module credits you accrue.

The first recommended module is called Enhancing Health and Wellbeing. This introduces you to the core theoretical concepts related to the promotion and enhancement of health and wellbeing, and you will be supported to reflect upon your career to date, considering how you would like to progress in preparation for your learning journey ahead. This initial support will prepare you to take control of your learning throughout the rest of the programme.

The modules you undertake next can be chosen from a range offered within the Canterbury Christ Church University postgraduate portfolio, your choice of modules will reflect your learning and development needs and where relevant those of your supporting organisation. If you opt for the generic

programme award title, eg MSc Health and Wellbeing, the choice of modules is up to you; if you opt for a MSc with negotiated endorsement eg MSc Health and Wellbeing (plus negotiated endorsement) then you will need to identify modules that can demonstrate your learning in relationship to this endorsement in conjunction with your academic tutor and these will need to be agreed by the exam board. This is where DOs can identify their specific interest and ensure that the MSc supports this. As well as clinical topics, you could select modules focussing on education or leadership.

Gill Bickle has been working on the Masters part time. She says, "I'm over half way through now. I have completed the Enhancing Health and Wellbeing module. It is all about how you promote health, positive ways of doing it, how health has been formed over the years – making health better rather than curing illness. In optics, we look at treating 'the disease' of myopia or hyperopia: this gives you a whole new way to look at things." Gill has also taken two public health modules. She says, "The first module looked at epidemiology. It takes a step beyond research at degree level to research at masters level, which is fascinating. It has really helped me develop ideas about evidence based practice. I also studied a module on social aspects of public health as I want my masters to focus on optics and public health. I feel I am getting more of an idea of what other professions are doing to promote health and what the optical profession could be doing."

Gill has also studied for a negotiated learning module. She says, "A negotiated learning module has wide parameters and minimal support so I would advise that you do this towards the end of your course, when you know more about the level you need to write at. You pick your own topic which relates to something you are involved in at work. I picked my first topic when the blue light debate kicked off. I looked at the research Essilor had based their work on, and tracked back to previous research that had informed those studies." Gill was required to write a 4,000-word paper on her findings. She says, "Next, I may develop what I have learnt in another negotiated learning module about how the information has changed my practice." After completing a further module, Gill is planning to do the compulsory module on research methods and start her dissertation.

develop sound knowledge and understanding of different research approaches and methods which will enable you to plan and undertake a substantive dissertation or project in a topic relevant to your profession. At the end of these modules you will be able to produce clear aims and objectives for your study and be able to select and evaluate key research and other evidence. You will be able to select and justify a study design or methodology and be able to analyse and interpret relevant data. You will be able to reflect on the processes undertaken in carrying out a dissertation or project and discuss findings in relation to theoretical perspectives and your professional practice.

Enhancing your knowledge and understanding through studying for the MSc could contribute to your career progression. In addition, the skills you

"If you want to go into research you can do your masters with CCCU, our partner university. Finish your BSc – you will need to have achieved a first or 2i. After you apply for your masters you will have a telephone interview with Jeannette Head and will need to demonstrate that you are ready for independent study. Hopefully in future years I can provide support from an optical perspective for students going through the masters."

Government loans of up to £10,000 are available for some postgraduate Master's courses. Students may self-fund their course or a sponsor may fund or part-fund. Bursaries, scholarships and fee discounts may also be available. UK candidates can apply on university application form which you are able to download: <https://www.canterbury.ac.uk/study-here/courses/postgraduate/>

'I'm over half way through now. I have completed the Enhancing Health and Wellbeing module. It is all about how you promote health, positive ways of doing it, how health has been formed over the years – making health better rather than curing illness.'

Research modules make up the final section of the MSc programme of studies The Research Approaches and Methods module (RAM) develops knowledge and understanding of research methods, and is followed by a dissertation or project. The aim of the research modules within your programme are to enable you to

gain will enable you to write for professional journals and/or present at conferences, sharing best practice and raising your professional profile. Your postgraduate qualification could also help you to stand out in an increasingly competitive employment market, supporting you to consider senior, specialist or advanced roles. Gill says,

health-and-wellbeing.aspx. For more information regarding the application process, contact: postregandfd-healthadmin@canterbury.ac.uk. For further details about the programme, contact the programme director, Jeannette Head by email at jeannette.head@canterbury.ac.uk. Applications need to be in by December to start in 2018.

Steven Pringle

We find out about Steven and his research

Steven Pringle is a dispensing optician at Thompson Opticians Alnwick and completed his degree course with ABDO College. While many students stumble into optics, Steven comes from a family that has worked in the field for many years, and initially tried to avoid it!

He explains, "My grandfather was an ophthalmic optician, my father was a dispensing optician, my mother did the accounts and reception. When I left school I didn't do much for a while, then finally started working for my dad. I started working on reception, spent some time as a dispensing assistant then moved to work in the lab. When my dad retired I started the dispensing course. I moved to my current post between year one and year two as by then the family business had a new owner." He continues, "I chose ABDO College because I liked the idea of working and studying. I was one of the older ones on the course and I thought I'd have plenty of time to study in the evenings. In reality I found there was lots of work to do."

It can be nerve-racking travelling the length of the country to start a new course, Steven says, "When I first turned up I didn't know anyone else on the course so it was really interesting to meet people. It gave me a chance to get to know what was happening across the industry." Steven has extensive experience compared to some people on the course. He says, "I had been in the industry for fourteen or fifteen years before starting my DO training. My



recent lab work in particular gave me a bit of a head start in year one of the course. Focimetry and repairs are the things that I was doing every day. I'm okay at maths so that part of the course wasn't too intimidating either." Like most people Steven had his least favourite subjects too. He says, "I wasn't too keen

on anatomy at first, I hadn't looked at that since GCSEs, but I enjoyed it by the end. Somewhere in year two when I was working on getting my anatomy knowledge up to scratch everything seemed too much, it was quite a struggle. However by the time I started year three we were pulling together everything we had learnt and it was much better. Completing the course and getting the qualification was a real high point, as well as making friends who I'm still in touch with."

All third year degree students need to come up with a topic at the start of the year for their dissertation. Choosing the topic can take some time and thought. Steven says, "I struggled to come up with a good topic, to find what interested me not just in practice but generally. I thought about sports dispensing but felt there was too much information out there to narrow it down to a single focussed research question. I thought I'd look for something technology related which ties in with my personal as well as optical interests." Steven finally decided to address the question, 'Can modern technology improve compliance and successfully

'I chose ABDO College because I liked the idea of working and studying. I was one of the older ones on the course and I thought I'd have plenty of time to study in the evenings. In reality I found there was lots of work to do.'

treat childhood amblyopia?’ He says, “It is quite an emerging area which made my initial job more difficult. There wasn’t a lot of research out there. I narrowed it down to four relevant papers, once I’d focussed on treating children.” Students are required to assess the quality of research as well as the findings. Steven says, “Three of the four papers I found had very good statistical analysis, only one was less in depth and shorter as it was a preliminary to a larger proposed research project.” Considering the results that he found, Steven says, “There were very positive results showing a big improvement in binocular vision across the studies. The other thing I was looking at was whether the use of technology improved compliance compared to patching. I was interested to find, perhaps against my expectations, that in three of the tests it didn’t improve compliance. One study using 3D glasses to watch modified TV films did. My interpretation of this is that compliance depends on how sophisticated the thing children were presented with was: something simple and cheap didn’t engage them so much. You might need a modified version of a very popular game to keep children engaged.”

Like many ABDO College students Steven is already considering his next qualifications, moves that would surely please his grandfather. He says, “I like being on the dispensing side though because you get time to interact with people. I’ve thought of doing the contact lens course, or the bridging course to optometry once I have been qualified two years.”

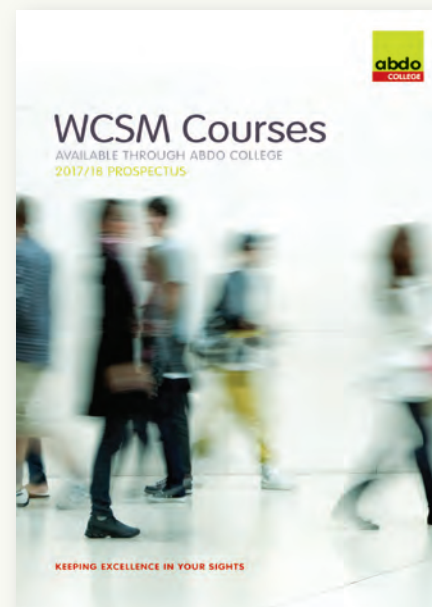


ABDO College prospectus

ABDO College specialises in distance and blended learning education for the optical profession. It is the only college in the UK devoted solely to the teaching of ophthalmic dispensing and its related specialist areas.

Offering a range of courses including access, foundation degree, diploma, degree, advanced and honours, ABDO College provides quality programmes leading to ABDO examinations and qualifications.

To obtain a copy of the prospectus, please contact the Courses Team at ABDO College on 01227 738 829 (Option 1), or email info@abdocollege.org.uk



WCSM Courses prospectus

The WCSM Courses prospectus features the WCSM Courses currently available through ABDO College:

- Level 2 Optical Support
- Level 3 Optical Support
- Level 4 Diploma for Optical Assistants
- Level 4 Diploma for Optical Technicians
- Fast Track Technician Training for FBDos
- SCQF Level 5 Certificate in Optical Care
- SCQF Level 7 Certificate in Optical Care

To obtain a copy of the WCSM Courses Prospectus, please contact the Courses Team at ABDO College on 01227 738 829 (Option 1), or email info@abdocollege.org.uk

Can modern technology improve compliance and successfully treat childhood amblyopia?

By Steven Pringle BSc(Hons) FBDO

INTRODUCTION

Amblyopia is a common condition whereby one eye, even corrected does not achieve its expected visual acuity (Levi *et al.*, 2015). Amblyopia is currently treated as a monocular condition during the critical period (Sengpiel, 2014). Initially, where surgery is not required, amblyopia is treated by prescribing spectacles (Holmes, 2015), when this is not sufficient, a regime of patching is used as treatment (Hess and Thompson, 2013). A key issue with this method of treatment is that the patient must be compliant. Another issue with this form of treatment is that it assumes amblyopia to be a monocular condition; however, tests have established that amblyopia is in fact not a monocular defect (Birch, 2013).

The aim of this study is to evaluate new methods of amblyopia treatment, to determine their suitability for use treating childhood amblyopia and if presenting subjects with more engaging forms of treatment improves compliance rates.

DISCUSSION AND RESULTS

Four papers were selected for analysis and are presented below in chronological order of publication.

'An exploratory Study: Prolonged periods of binocular stimulation can provide an effective treatment for childhood amblyopia' (Knox *et al.*, 2012)

This study aims to expand on previous studies that have looked at a binocular treatment of amblyopia and to evaluate its potential to be effective for treatment of amblyopic children. The study was performed on fourteen children. Dichoptic images were presented to the subject using a virtual reality headset. The treatment in this study involves playing a simple computer game. Successfully playing the game required binocular interaction between the two eyes. The mean results of the study show that there is a statistically significant improvement in the visual acuity of the subjects. There are no results for patient compliance for this study as it was performed under supervision. The findings of this study compares the visual

gains to improvements that were found in a monocular treatment study (Liu *et al.*, 2011) stating similar results were achieved in five hours of binocular training instead of forty to sixty hours of patching.

'Binocular iPad treatment for amblyopia in preschool children' (Birch *et al.*, 2015)

The aim of this study was to see if amblyopic children could have successful binocular

treatment at home delivered by a tablet computer. The tablet based treatment consisted of a selection of four games that are played whilst red/green anaglyphic spectacles are worn. The participants had their visual acuity and stereoacuity measured and were instructed to use their iPad for four hours per week for four weeks. The visual acuity and stereoacuity were re-measured after the four weeks. The compliance rates for this study



were low at 50 per cent. The test group demonstrated an improvement over the 8–18 hours spread over four weeks that is comparable to 56–84 hours of patch wear (Stewart *et al.*, 2007). There was no marked improvement in stereoacuity.

‘Dichoptic movie viewing treats childhood amblyopia’ (Li *et al.*, 2015)

The research in this study was conducted upon a small group of eight amblyopic children between the ages of four and ten. Treatment in this study consisted of watching six dichoptic films over a two week span. The subject’s visual acuity and stereoacuity were re-measured at the end of testing. As this test was performed in laboratory conditions, compliance rates are high. This study demonstrates that using a passive method of treatment is a potential new avenue of treatment for amblyopia. There was an improvement in the vision of the subjects in the test group of between one and four lines with nine hours of treatment spread over two weeks.

‘Modified iPad for treatment of amblyopia: A preliminary study’ (Handa *et al.*, 2015)

This study was performed on a small group of seven children between the ages of three and eight. The tests were performed using a specially modified iPad. Treatment in this study involves the subject wearing a polarising lens with their amblyopic eye and a tinted lens in their fellow eye. The subject plays a specially designed game on the iPad for one hour per day. The compliance rates were monitored automatically by the iPad. Results show an improvement in all participants that completed the study. Compliance levels in this study were high with four participants using the modified iPad for three hours daily. The findings of this study indicate an improvement in the vision of subjects of between one and four lines.

The results of the four studies all show an improvement in the visual acuity of participants. The next step recommended is for large scale randomised clinical trials to be performed. Improvement in vision was rapid in all studies with subjects improving between one and four

lines in fewer than thirty hours. For comparison to achieve a single line improvement for patching requires 120 hours of patch wear (Stewart *et al.*, 2007).

Compliance is one of the biggest problems with the current treatments (Wang, 2015). Interactive methods seem to do little in terms of improving this in the study by Birch *et al.* (2015). This may be due to the sophistication of the game that is used though as in the study by Handa *et al.* (2015) compliance rates were better than expected. Qualitative data from the study by Li *et al.* (2015) indicates that adequate time is spent watching television to provide treatment this way. The downside with this study is that special versions of films or television programs would have to be created for treatment and new content regularly added for this to remain engaging; this could be cost prohibitive unless it could be automated.

CONCLUSION

There is strong evidence that binocular treatment using technology gets positive results quickly when used to treat amblyopic children. This should be explored in future through large scale randomised clinical trials to confirm results.

Should the future of amblyopia treatment be through the use of these technologies this would be best delivered in the home. The most efficient way for this to happen is if current unmodified technology can be used. This allows equipment that is already being used to deliver treatment once having had the necessary software installed.

Given that compliance rates were variable between the studies it may be that highest compliance would be delivered by devices that perform a number of different tasks, playing a video content as well as having interactive content. It may be possible in the future to develop software that could dynamically adjust any content so that it could be used as binocular treatment device. A system that allowed any content to be used would have a higher compliance given the current prevalence of tablet computer use by children.

REFERENCES

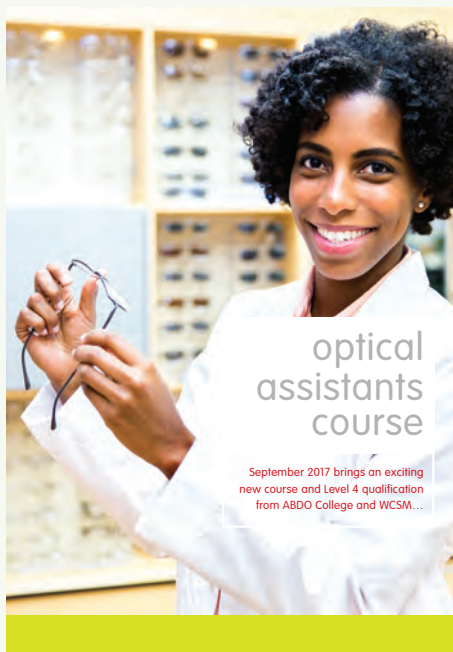
- Birch, E. E. (2013) ‘Amblyopia and binocular vision’, *Progress in retinal and eye research*, 33pp. 67–84.
- Birch, E. E., Li, S. L., Jost, R. M., Morale, S. E., De La Cruz, A., Stager Jr, D., Dao, L. and Stager Sr, D. R. (2015) ‘Binocular iPad treatment for amblyopia in preschool children’, *Journal of American Association for Pediatric Ophthalmology and Strabismus*, 19(1), pp. 6–11. doi: <http://dx.doi.org/10.1016/j.jaapos.2014.09.009>.
- Handa, T., Ishikawa, H., Shoji, N., Ikeda, T., Totuka, S., Goseki, T. and Shimizu, K. (2015) ‘Modified iPad for treatment of amblyopia: a preliminary study’, *Journal of American Association for Pediatric Ophthalmology and Strabismus*, 19(6), pp. 552–554. doi: <http://dx.doi.org/10.1016/j.jaapos.2015.08.008>.
- Hess, R. F. and Thompson, B. (2015) ‘Amblyopia and the binocular approach to its therapy’, *Vision research*, 114pp. 4–16. doi: <http://dx.doi.org/10.1016/j.visres.2015.02.009>.
- Hess, R. F. and Thompson, B. (2013) ‘New insights into amblyopia: Binocular therapy and noninvasive brain stimulation’, *Journal of American Association for Pediatric Ophthalmology and Strabismus*, 17(1), pp. 89–93. doi: <http://dx.doi.org/10.1016/j.jaapos.2012.10.018>.
- Holmes, J. M. (2015) ‘Designing clinical trials for amblyopia’, *Vision research*, 114pp. 41–47. doi: <http://dx.doi.org/10.1016/j.visres.2015.01.029>.
- Knox, P. J., Simmers, A. J., Gray, L. S. and Cleary, M. (2012) ‘An exploratory study: prolonged periods of binocular stimulation can provide an effective treatment for childhood amblyopia’, *Investigative ophthalmology & visual science*, 53(2), pp. 817–824.
- Levi, D. M., Knill, D. C. and Bavelier, D. (2015) ‘Stereopsis and amblyopia: A mini-review’, *Vision research*, 114pp. 17–30. doi: <http://dx.doi.org/10.1016/j.visres.2015.01.002>.
- Li, S. L., Reynaud, A., Hess, R. F., Wang, Y., Jost, R. M., Morale, S. E., De La Cruz, A., Dao, L., Stager Jr., D. and Birch, E. E. (2015) ‘Dichoptic movie viewing treats childhood amblyopia’, *Journal of American Association for Pediatric Ophthalmology and Strabismus*, 19(5), pp. 401–405. doi: <http://dx.doi.org/10.1016/j.jaapos.2015.08.003>.
- Liu, X., Zhang, T., Jia, Y., Wang, N. and Yu, C. (2011) ‘The therapeutic impact of perceptual learning on juvenile amblyopia with or without previous patching treatment’, *Investigative ophthalmology & visual science*, 52(3), pp. 1531–1538.
- Sengpiel, F. (2014) ‘Plasticity of the Visual Cortex and Treatment of Amblyopia’, *Current Biology*, 24(18), pp. R936–R940. doi: <http://dx.doi.org/10.1016/j.cub.2014.05.063>.
- Stewart, C. E., Stephens, D. A., Fielder, A. R. and Moseley, M. J. (2007) ‘Modeling dose-response in amblyopia: toward a child-specific treatment plan’, *Investigative ophthalmology & visual science*, 48(6), pp. 2589–2594.
- Wang, J. (2015) ‘Compliance and patching and atropine amblyopia treatments’, *Vision research*, 114pp. 31–40. doi: <http://dx.doi.org/10.1016/j.visres.2015.02.012>.

New Level 4 Diploma for Optical Assistants course

Have you or a member of your team completed a level 2 or 3 course and want to take the next step? Or perhaps you are thinking about becoming a dispensing optician but are unsure whether you are ready? The new Level 4 Diploma for Optical Assistants course from ABDO College could be just what you need.

The Level 4 Diploma for Optical Assistants (accredited by Ofqual – The Office of Qualifications and Examinations Regulation) is a new qualification awarded by the Worshipful Company of Spectacle Makers for optical assistants. It is expected that holders of the qualification will be entitled to use the letters SMC (OA) after their name. It is tailored to the needs of those who aspire to become senior optical assistants and supervisors, as well as those who are looking for a step up from level 2 or 3. The course will also give a great foundation for those who may wish to go on to study for the FBDO qualification at a later date.

The course makes another step in the optical career pathway. It is now possible to start work in the optical sector and work your way from a level 2 qualification right up to the FBDO diploma and a degree, both at level 6. All courses are offered via ABDO College, with levels 2, 3 and 4, available entirely via distance learning, backing up the skills and knowledge you acquire on a day to day basis working in practice. ABDO's sector skills development officer, Nick Walsh, says "Supporting our businesses to have



sustainable growth, to plan for the future and to thrive, we need to have the right people with the right skills delivering excellence to our patients.

For individuals working in our practices, the opportunity to grow and develop is key."

The Level 4 Diploma for Optical Assistants is a two-year distance learning course. Students are assigned a personal tutor, and work through a series of papers at their own pace. In general, it is expected that you will need to study for at least six to eight hours per week.

There are no specific entry requirements. However, you will be expected to be able to demonstrate knowledge and experience gained in practice. If you have already achieved a Level 3 Certificate or Diploma in Optical Support and/or a nationally accredited qualification in mathematics equivalent to grade C or above at GCSE within the last five years, you may be able to obtain some exemptions from material already covered. Year 1 consists of three mandatory units plus one optional unit. Year 2 consists of three mandatory units (4, 5 and 12) plus two optional units. The first year mandatory units include learning about The Eye and The Principles of Optics, Principles of Optical Retail Practice Support and Management, and The Provision of Optical Screening and Clinical Support.

This is the first time this course has run and demand is expected to be high. The course starts this month, so if you are interested get in touch right away. Further details about the course and the content of each unit can be found here: <http://abdocollege.org.uk/course/level-4-diploma-for-optical-assistants/> For more information please contact the ABDO College Courses Team on 01227 738 829 (Option 1) or email info@abdocollege.org.uk

In the second year you will study The Provision of Spectacles in Optical Practice, and Supporting the Provision of Contact Lenses.

The optical units give you a chance to specialise and follow your own interests or those topics which will be most applicable in your practice. You can learn more about mathematics, the theory of ophthalmic lenses and/or the theory of optics, all of which will stand you in good stead for working towards becoming a dispensing optician. You can opt to learn more about low vision aids. If you are interested in the clinical side of eye care you can opt for a unit which focuses on the anterior eye and ocular supplements. For those more interested in management, you can also select a unit called Business Principles for Optical Practices.

For all these units you will be assessed at the end of the year by written exams.

There is one final unit, Optical Skills in Practice, which looks at your application of what you have learnt in practice, in the areas of effective patient communication, spectacle repairs and adjustments, spectacle dispensing, spectacle verification, optical screening and contact lenses. There is a mandatory practical assessment for this unit, involving submission of a portfolio of evidence, plus a viva and one day practical assessment.

In general it is expected that the course will take two years. If you have an exemption from some units you may be able to complete the qualification in a shorter time.

ABDO College on social media

ABDO College is now active on social media. You'll find news about current and future courses, and everything from dates of manufacturer visits to application deadlines and revision tips. Do like, follow, share and invite colleagues:

 <https://www.facebook.com/ABDOCollege/>

 <https://twitter.com/abdocollege>

Moodle update

ABDO College's move to an online learning environment is continuing apace. Over the last year the Access courses have been run online using Moodle. Lecturer Simon Butterfield is in charge of the move, and he says, "There are a few things we've learnt to take forward, on top of those changes that have already been implemented, however, the feedback from the tutors on this, and the VLP training courses has been very positive." He continues, "We now have the majority of our distance learning tutors trained and ready to go for the first years joining the Foundation Degree and Diploma courses this autumn. We'll also be running further training sessions in the autumn for the small number of tutors who have not been able to be involved at this stage, to be ready for the Year 2 roll-out in 2018-19. Tutors will be offered both face-to-face sessions, and online training, and electronic marking advice." In the future, all training courses for new ABDO College tutors will be run through the online environment as well.



Godmersham Park features on new polymer £10 note

The Bank of England marked the 200th anniversary of Jane Austen's death on 18 July 2017 by unveiling the new £10 note featuring the renowned writer and Godmersham Park. As well as being the home of ABDO College for the last sixteen years, Godmersham Park was home to Jane Austen's brother Edward Austen Knight from 1798. While he lived there, Jane Austen stayed and wrote some of her well-known books.



Edward Austen inherited Godmersham Park from the rich, childless Thomas Knight, and later added Knight to his own name. Jane Austen visited the house often and it is believed that it was the inspiration for a number of her novels, most particularly *Mansfield Park*. Jane Austen's writing table also inspired the banknote: the central design in the background is inspired by the 12 sided writing table, and writing quills, used by Jane Austen at Chawton Cottage.

Mark Carney, the Governor of the Bank of England said: "Jane Austen certainly merits a place in the select group of historical figures to appear on our banknotes. Her novels have an enduring and universal appeal and she is recognised as one of the greatest writers in English literature. As Austen

joins Adam Smith, Boulton and Watt, and Winston Churchill, our notes will celebrate a diverse range of individuals who have contributed in a wide range of fields."

Thomas Knight died in 1794. He left Godmersham and other estates to his widow, Catherine, for her life and confirmed Edward Austen as his adopted heir. Four years later Catherine decided that the estate was better passed over to Edward and his family to run, rather than for him to wait for her

'Her novels have an enduring and universal appeal and she is recognised as one of the greatest writers in English literature.'

to die before inheriting. She asked for a rent of £2,000 per annum for the estate, and Jane Austen commented in a letter, "Mrs Knights giving up the Godmersham Estate to Edward was no such prodigious act of Generosity after all it seems, for she has reserved herself an income out of it still; –this ought to be known, that her conduct may not be over-rated. –

I rather think Edward shews the most Magnanimity of the two, in accepting her Resignation with such Incumbrances." (8 January 1799).

Back to the present day, the Austen note is issued as a £10 note printed on polymer this month (September 2017.) Features of the design on the reverse of the Jane Austen note include the quote – "I declare after all there is no enjoyment like reading!" from *Pride and Prejudice*, which is said by Miss Bingley in Chapter XI. There is also a portrait of Jane Austen commissioned by James Edward Austen Leigh, Jane Austen's nephew in 1870, adapted from an original sketch of Jane Austen drawn by her sister, Cassandra Austen. One further illustration is of one of Austen's best known characters, Miss Elizabeth Bennet undertaking "The examination of all the letters which Jane had written to her" – from a drawing by Isabel Bishop (1902–1988).

Find out more about the history of Godmersham Park and how it came into Jane Austen's family at the Jane Austen Society of North America's site, in an article entitled *Edward Knight's Inheritance: The Chawton, Godmersham, and Winchester Estates*.
<http://www.jasna.org/persuasions/on-line/vol34no1/grover.html>

Steve Roberts interview

Steve Roberts has recently taken on the role of courses coordinator, optical support programmes at ABDO College, and is now the point of contact regarding all things relating to the Worshipful Company of Spectacle Makers courses. In this article you can find a little more about Steve's background and his aims for his new role.

Steve Roberts is a dispensing optician who has been working in independent practice. He will continue to work in practice alongside his work for ABDO College, in his courses coordinator role. Steve is also an ABDO College tutor. He explains how he got into optics: "I used to be a retail manager of a shoe shop. I wanted something that was still customer focussed but more technically challenging. By chance I saw an advert for customer service staff at an optics company. I didn't even realise at that stage it was a high street optical practice. I applied and in the process found out more about the company and the job. I joined as a receptionist, really as something to do while deciding what to do with my life. I found that I loved the work. Fortunately the manager realised I wanted more, and put me on the DO course." Steve studied for his qualifications in dispensing optics through day release at City and Islington College. He says, "I had lots of support from fellow students and the teaching staff. I realised optics was a massive area with so much to learn. I found it really useful to bring the learning to life by working and studying at the same time."



Steve remained with the Ronald Brown group throughout his training and for a total of just under nine years. He says, "I then moved to an independent in Hertfordshire, Aves Optometrists. I have been there for over 10 years, and now combine that with working with the College. The practice is a fabulous place where the patient comes first, and I now also have the opportunity to use my skills in helping the next generation." Alongside his work in practice, Steve has also been an ABDO College distance learning tutor for the last two years, liaising with and

supporting students on the access and dispensing courses. He says, "Being a tutor has given me a chance to get more involved at different levels and have contact with students."

As well as his optical skills, Steve also brings IT skills to ABDO College. He says, "I am used to looking after the practice IT, everything is computerised. I think that in the future there is lots of scope for using increasing amounts of multimedia technology to make learning interesting." Outside of work you may find Steve still working on a computer, and he also enjoys badminton and cycling.

Considering his new position, Steve says, "The WCSM courses are a fantastic way of developing optical support staff in an interesting and engaging way. This staff development is very relevant for practice success. With this sort of training, staff themselves will enjoy their job more. The courses are a great introduction to the professional and technical sides of optics at a straightforward level, without a highly pressured academic environment. I'm really pleased to be part of the team, in an industry that cares, upholding high standards at ABDO College with the WCSM."

Steve works at ABDO College on Mondays and Tuesdays and can be contacted by email at sroberts@abdocollege.org.uk You can find out more about WCSM courses for optical support staff at <http://abdocollege.org.uk/course/wcsm-courses/>

Access Courses

An opportunity towards a career as a dispensing optician

ABDO College's Access Courses are designed to help prospective dispensing optician students to meet the necessary entry requirements. They are also a useful refresher for those who have been out of education for a while. The entry requirements for the ABDO College Level 6 Fellowship Dispensing Diploma (FBDO) and Foundation Degree/BSc (Hons) courses are five GCSEs at grade c or above, which must include English, mathematics and a science subject. Each Access course is considered the equivalent of one GCSE. The Access Courses are available in the five key subjects of English, Mathematics, Optics and Dispensing, Human Biology and General Science.

- Courses commence: February 2018
- Method: Distance learning
- Candidates should ideally be educated to GCSE standard and possibly have already attained some of the GCSEs required for enrolment to dispensing courses
- Duration: Approximately 20 weeks

Application deadline: January 2018

Access a pathway to become a DO

For further information and application forms for these and other courses, or to request a copy of the ABDO College Prospectus, please contact the ABDO College Courses Team on 01227 738 829 (Option 1) or email info@abdocollege.org.uk

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