Self regulated learning, what's that all about Miss?

A learner centred approach to developing independent learning skills

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Abstract

As a teacher I often use the phrase 'independent learning' to my new AS students with the assumption that they know what it and this 'common' phrase becomes increasingly more present in my teaching as the examinations approach. As the pressure of reduced contact time and increased class sizes loom, I'm sure many teachers alike, are placing great emphasis on the student doing by for themselves as one way of a 'resolving' this issue. However, do our young students even know what we mean when we use this 'popular' phrase? What strategies actually work for them? Are they the same as what I think?

The following paper aims to investigate 7 students' current understanding of independent learning and self regulated learning strategies (SRLS) via semi-structured interviews. The students were active participants in the research as the strategies put forward in educational literature were discussed and reviewed by the students as they put together a revision toolkit based on them. Once the toolkit was put together their views of independent learning and SRLS were collected again.

The paper ends on practical suggestions on what strategies could be included in your classroom to encourage successful independent learning. These practical strategies will be flexible so that they can be applied to independent learning throughout the year and for that all important build to the exams. Therefore, it is hoped that this paper will be a useful tool to use when helping your students to be better independent learners, and by doing that, it is hoped that you will have useful ways of tackling the increasing issue of 'too much to teach and not enough time to do it'.

Introduction

Independent learning and the ability to self regulate that learning is becoming increasingly important for the typical sixth form student. As the Government require educational providers to do more for less it ultimately means that contact time is reduced and the sixth form learner is being encouraged to do more on their own. The requirement for students to develop these essential independent learning skills is also highlighted when we consider the pressure students are under to ensure that they secure that University place by performing to the best of their ability in their A level examinations. Successful independent learning would seem to never have been so important than it is right now.

Although such skills involved within independent learning are crucial for the educational progression, and are considered the 'norm' within Higher Education, are teachers guilty in assuming that students know how to do it? Some students may do it well although such students are rare. Yet within the 'inclusive' educational provider, the educational provider of students who may not have 10 GCSE's at grade A, we can often hear teachers comment in the staffroom about how Alexander hasn't passed that timed assessment again and how Sally still needs to submit her essay and that Angela just hasn't got an idea on how to keep a track of her BTEC submissions. Is it that these learners are lazy and lack the ability to motivate themselves outside of the classroom? Or is it that these learners lack the skills to engage in work outside of the classroom? Maybe this is because we as teachers focus too much on teaching to the test; after all we must meet our targets. Maybe our learning environments are too restrictive or maybe the learning environments that students came from were too restrictive, either way a question is raised, do our students really know how to be successful in their independent learning? I anticipate that some readers of this paper will argue that students like Alexander, Sally and Angela are just lazy, or that to even think that they don't know how to engage in independent learning is a patronizing and a somewhat absurd concept. However for me, I think it is important to consider that some students might just need a little help and guidance with the whole process of learning to learn and developing that all important expansive approach to their study. The 'Learning Apprentice' (Coffield 2009) is how we should see the modern day student and pedagogy should not just be a passing down of content knowledge, a sharing of our wisdom; what it should also be is a passing down of the skills required to absorb that knowledge and take hold of that wisdom, for students to make it their own.

The following paper summarises a project that sought to investigate independent learning from the point of view of students. It aims to investigate **their** understanding of what independent learning actually is; to provide an opportunity for the students to discuss self regulated learning strategies and review what works for them. Their thoughts and suggestions were then put together in the form of a toolkit - a resource that will help other students to begin the process of becoming a successful independent learner. It is hoped that their acquired knowledge of self regulated learning and how to be a successful learner can be shared with other students and it is hoped that this wisdom can be then be passed on to their teachers. Similar to the snowball effect, it is then hoped that the teachers will then pass this on to their students.

The paper will begin by exploring the current literature in regards to independent learning that being how do we define it, what are the benefits for the student and how can teachers help students to develop the skills needed to be successful.

Specific elements that are considered to be essential to successful independent learning will then be discussed in light of what literature says and what the students think about it and ultimately how they think it should be encouraged. The paper will then end on some suggestions on how successful independent learning could be encouraged with extracts included from the toolkit included in the appendix

Literature review

Independent learning and the use of self regulated learning strategies is a popular area of educational research and researchers are keen to understand more about the influence it has on academic performance (e.g. Ning and Dowing 2012). As Meyer et al (2008) identified, independent learning can be described in many ways, most commonly with the phrase 'self regulated learning'. Across the globe the educational researchers use different labels for independent learning and it's concepts, for example, in the USA 'self regulated learning' (Zimmerman 1986) is used; the Danish view it as 'self directed learning' (Bolhuis & Voeten 2001); 'Learning to learn' is how British researchers Higgins et al (2005) define it and finally 'Active Learning' is another term used by Israeli writer Birenbaum (2002). Although different words are used, fundamentally they all mean the same thing. That independent learning is the ability to have an understanding of one's own learning; a competence in monitoring and regulating learning. Coffield (2009) describes this as 'going meta': active engagement which can be achieved through the employment of certain metacognitive strategies e.g. goal setting, planning, organisation and reviewing understanding (Zimmerman 2008). The popularity of self regulated learning in educational research highlights the importance of this area of research. We can also infer that the concept of independent learning and the skills associated with lifelong learning are of key importance to Ofstead as stated in the Common Inspection Framework (2012) they propose to use such to help to judge the quality of teaching, learning and assessment.

The key concepts of independent learning and being self regulated in that learning do differ slightly dependent the author of the book or article, but they all do have generic concepts. For example, Pintrich (2000) proposes a model that has four phases: planning, self monitoring, control and evaluation. Planning is where activities such as goal setting occur; self monitoring is being aware of your own cognition, motivation and emotion for example, being aware of how you currently learn and what learning methods/strategies best suit you. Control is based upon making sure that you can regulate your time and environment and finally the evaluation phase is the ability to reflect and evaluate on the success of the task execution.

Much research has been done on the benefits of independent learning and the engagement of self regulated learning strategies for example in a literature review, Meyer et al (2008) summarise how it can increase academic performance, motivation, confidence, as well as reaching particular learner groups such as males and socially excluded young adults. However it is important to note that most of the research on the impact of independent learning is based on case studies and observations and therefore falls short of more controlled experimental research. One may then argue that we can never be confidently sure that any benefits associated with independent learning are in fact a direct result of independent learning and the employment of self-regulated learning strategies. Regardless of this, the fact that there is an overwhelming amount of qualitative research one may assume that there are incredible benefits to developing effective independent learning skills.

Recommendations by Ning and Dowing (2012) are that teachers should consider the incorporation of self-regulated activities into the curriculum to strengthen positive study behaviour. Similarly, Meyer et al (2008) identified that effective independent learning is not an automatic process for all learners and that students need to learn how to learn and this should be activity promoted by teachers.

Literature provides a wealth of suggestions that could be adopted by teachers in this promotion, including, providing the student the opportunities to self monitor (Montalvo and Torres 2004); providing an environment for them to practice self regulated learning strategies (Mckeachie 1988) and establishing a language for learning (Allan and Lewis 2001) i.e. teachers and students talking to each other about learning. However to gain a clearer understanding of how independent learning could be successfully applied in schools and colleges, more detail is needed in regards to the views of the students and teachers (Meyer et al 2008). Consulting learners about their learning and giving them a voice was also a recommendation made by Coffield (2008) when outlining the core process of teaching and learning. So it would seem that independent learning and its concepts are researched at length yet the extent, to which the views of the teachers and learners are known, is limited.

Therefore the following paper aims to investigate the views of the learner in regards to independent learning and self-regulated learning strategies. This investigation goes one step further based on the recommendations of Fielding (2004) who argues that students should be active participants in research that is about their learning. Therefore the students will be co-researchers in this project and will be involved the development of a revision toolkit that raises awareness of the essential skills needed to become a successful independent learner. Albeit their involvement will be steered by myself to ensure that the students stay focused on what is important to the topic of investigation. Following from this process of 'going meta' about going meta, their views of independent learning and recommendations of how they think that I could take this further and help my professional colleagues to develop their own successful independent learners, will also be collected.

There will hopefully be several outcomes, firstly for the students involved directly in the project they will investigate their own learning and be made aware of strategies that they may not have considered before. They will begin to develop those essential thinking and study skills that are crucial for progression and therefore be in receipt of a rather counter approach to revision than the usual 'teaching to the test'. It is hoped that it will create a more expansive learning environment for these individuals, a way of reducing the narrow or restrictive approach to assessment that is more often or not seen in post compulsory education. This would be seen as a favourable approach by critiques such as Ecclestone (2010). Secondly for students not directly involved they will be given a useful revision toolkit which may give them ideas on how to learn more effectively and finally, for other teachers to be made aware of how students like to learn independently which can then inform their future curriculum planning.

The tone for this paper is to present to you the views of the students throughout the active engagement of this project. Each phase will be discussed in light of literature, my views and the views of the learners involved. It is anticipated that

this paper will document the process of engaging learners in concepts they may never have explicitly considered. It steers away from the quantitatively driven research, we are possibly more familiar with, to a more qualitative account of an initiative in an inclusive City Sixth Form College.

The methodology

Phase 1 - *'invitation to discussion'*

Semi structured interviews were used to collect students' initial thoughts on independent learning. The topics were based upon the model proposed by Pintrich (2000) [see appendix A for details of the questions asked]
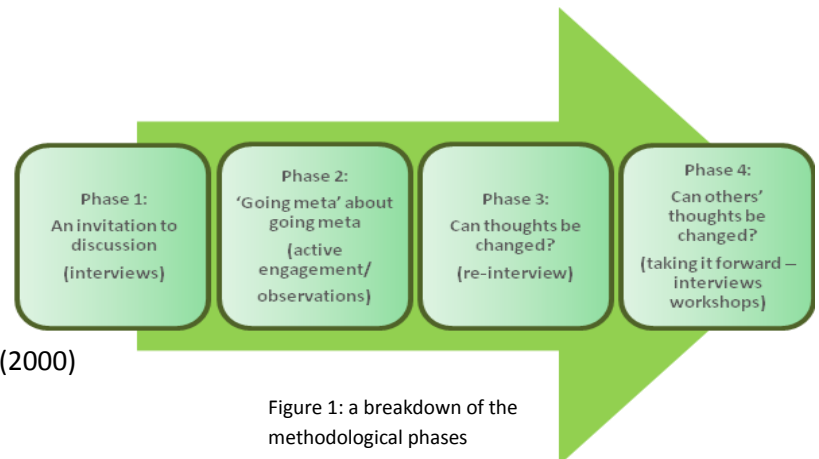

Figure 1: a breakdown of the methodological phases

Phase 2 - *'Going meta about going meta'*

Sessions over three weeks were put on for students to work in pairs/small groups to discuss the key elements of independent learning. The students were told that they would be designing a 'toolkit' that will be used by other learners and should therefore highlight what is important for successful independent learning. To help the students to focus their thinking and discussion they were asked to design their toolkit to help students with revising for the summer exams. The students were asked to design the toolkit with all learners in mind, that being male and female and of different abilities. The toolkit would be used to encourage students to think about all of the key aspects to independent learning and to almost be used as a guide on how to structure and maintain an effective revision schedule.

During each session, I would brief the learners on what the topic of discussion needed be e.g. goal setting and time management. Any questions the student had were answered. For the majority of the time the students were then left alone to discuss and develop their ideas. This was done to reduce any effects I may have on the student discussions. It was hoped that the students would then feel at complete ease to talk about learning, how their teachers encourage learning, what works and what does not work for them etc. It is anticipated that if I had stayed with them, they may have felt the need to discuss learning in a socially desirable way. However, some observations were made during the initial briefing of each week and during the final stage I was present to support them in their production of the toolkit i.e. ICT formatting.

Phase 3 - *'can thoughts change?'*

Semi structured interviews were used to collect students' thoughts on independent learning covering the topics that were discussed initially. In addition, students were asked to make recommendations on how we could take the concept of independent learning further within our college setting (see appendix B for further details of the additional questions asked)

Phase 4 – 'can others' thoughts be changed?'

'Sharing of the toolkit': Supplementary findings

The final version of the toolkit was shared with students attending revision classes and their thoughts about it were gathered. Students were encouraged to comment on the strengths and weaknesses of the toolkit (see appendix C for details of these findings)

The sample

8 AS students aged 16-17 years (5 Psychology and 3 Chemistry) from a Sixth Form College were invited to take part. All 8 students gave an initial interview, however one student dropped out of the project after the initial interviews took place. In addition, due to other work commitments, one of the psychology students was only able to take part intermittently.

The students were suggested to the project by their teachers. Each teacher was briefed on the project and was asked to identify students, who they think, may benefit from reflecting on their independent learning and who would be willing to participate in creating a revision toolkit for others. The potential students were then approached and informed of the details of the project, what would be expected of them and what the purpose was. The students were then required to sign a document informing of their consent to take part.

Ethical considerations

As the students were under the age of 18 years parental consent was sought before any student attended an interview. In addition, to maintain confidentiality students were required to provide a pseudonym to which they would be referred to as in any literature regarding the project. Where specific views of the students are incorporated in the text their pseudonym will be included in brackets, e.g (Jay). At times direct quotes are used with the permission of the speaker.

'An invitation for discussion'

Independent learning generally

Independent learning can be heard coming from a teacher's mouth on numerous occasions during the college term. It is used by teachers to refer to the work that students do outside of the lesson for example, homework and revision. I often use the term with my students, *"as part of your independent learning, you may want to look over the next topic"* or *"please use your independent learning to review unit 1"* or *"remember, it is expected that you do four hours a week on your independent learning"*. Now I know what I would like them to do, however I never explicitly say so. I just assume.

When questioned, students have a similar understanding about independent learning. For example, *"learning by myself"* (Miss T); *"getting essays and having to work on them at home"* (Jay); *"doing work outside of the class"* (Bam). The common theme being working outside of the classroom however, I noticed that students differed in the underlying concepts of what it means to them. For example, Jay was quite specific as he mentioned *"doing essays"* which is a little more measurable than more vague responses such as *"understand lesson work better"* (Miss P). Maybe this difference is due to the teacher's instructions or maybe it's due to differing intricacies of personality specifically associated with motivation. Either way a question is raised, do we as teachers ensure full clarity when we use these words?

The need to ask this question is further highlighted in a comment made by Miss P, *"..They do kinda just expect us to know what it is, but realistically I don't think anyone does know what it actually means."* And *".. They'll be like, go away and do some independent learning, and I'll be like on what?!"* (Miss T)

So the expectation to do independent learning is present in the student, they understand that they are meant to do it for their lessons, but what they are to do specifically is unknown. Maybe within the autonomous mind of the teacher there is this expectation that all students are as self-directed as them and students will clearly know what to do. This ambiguity is also reflected in literature as definitions of independent learning range extensively from active learning (Birenbaum 2002) to self-directed learning (Bolhuis & Voeten 2001) to self regulated learning (Zimmerman 1986). So the implication of this for teachers is to ensure full clarity when expecting your students to engage in independent learning. For example, give a specific task or set an essay however will this constitute the development of the autonomous independent learner? Probably not, however agreeing a specific vocabulary for learning may just be a good starting point.

Self regulated learning strategies

To focus the students understanding of independent learning, the students were asked about the strategies they used to revise for exams, including their GSCE examinations and more recently the AS mocks. There was an overwhelming

popularity of *"reading over my notes"* (Miss P),*"I look over my notes"* (Bam) and *"get my notes out and start reading"* (WB)*,* a rather passive approach to independent learning/revision some might say. However some may argue that this is a good approach to learning for example Coffield (2009) reports on a case of a girl who got achieved a grade A in an AS exam and this was the technique she employed. However this technique was what she did after each lesson rather than what she did for her revision. I feel that looking over notes should be followed up with a much deeper or strategic approach to ensure that that information has been processed and understood at a more sufficient level.

Goal setting is sometimes referred to as target setting. Bandura (1986) argues that most goals are often too complex or too general and therefore will present the creator with uncertainty and most probably will lead to non completion. In addition, Bandura and Schunk (1981) reported evidence that school pupils who had set specific goals such as completing a page in their maths booklets displayed better intrinsic interest in their subject and better skill. This would seem to suggest that realistic goal setting is beneficial. So it seems a shame that the students on the project didn't engage in this in a way that I would have hoped. For example, (WB) commented *"I don't really do it* [set goals] *I might say I'll do an hour of revision but that's it really"*. In addition, (LM) said, *"I don't do it but I think I should"* and (DP) commented that *"errrm I have made a revision timetable if that counts"*. This inconsistency would seem to suggest that again the students are aware of what is expected of them in regards to independent learning however it would seem that as the teacher we just expect that they know how to set these goals. The implication of this is that students need explicit teaching and guidance on how to set goals.

In regards to time management the majority of students said that this was a difficult thing to do for example (WB) "*I'm generally quite bad"* and *"I cram before the exam"* (LM). This is suggesting again that students are not as effective as they can be in their independent learning. However in regards to self reflection and monitoring, students were able to comment on this in a positive and constructive way. For example, (Jay) said that *"I write like 1-10 next to a study for bits I get and bits I don't get so I can always see the bits I don't get".* I infer from this that this student uses a grading system next to topics so he can clearly see what he understands and what he doesn't. I asked (Jay) if this figure ever went up and Jay replied that it often stays the same even if he has gone back over the topic in question. I feel that this is a confidence issue rather than a failure to take in more of the topic content.

Confidence was a theme that was picked up on throughout the initial interviews; often students commented on how they don't feel confident to set targets, or that they need support from their friends to be confident that they are revising or working on the right thing. They were quite negative towards themselves, and did not appear to have much self –efficacy about learning. In addition, there was a huge focus for students on learning with their friends.

'Going meta' about going meta

'Going meta' is a term Coffield (2009) put forward to describe the employment of certain meta-cognitive strategies crucial for successful independent learning. In other words knowing how you are learning the things that you are learning. 'Going meta' about going meta means that the students will be thinking about the learning strategies crucial for independent learning in the context of informing others about these learning strategies. This process is giving the student a voice about independent learning and ensuring active engagement from them too.

We are all aware of the huge focus student engagement and student voice has on 'the' college agenda as it is believed that this can be incredibly influential in improving teaching and learning. This is supported by a recent Ofstead inspection report for a Midlands FE college as they commented that "User engagement is outstanding. The college actively seeks views on how well it is doing from learners... Their views are valued and acted on."(Ofstead 2012)

So it would seem that student voice, user engagement, student involvement or whatever the label may be, is essential for an educational establishment however, one crucial issue that arises with the concept of student engagement and student voice is the extent to which the student is *actually* engaged. Fielding (2004) argues that student engagement takes the form of a continuum, a four –fold typology: 'students as a data source' where their previous performance informs practice to 'student as researchers' which is where the student voice is initiating change and taking a leadership role.

This phase of the project enabled the learners to fall in between these two continuum extremes. As the students were active participants they would be what Fielding (2004) called 'students as co-researchers'. They were given concepts to discuss e.g. goal setting, time management, strategies for memory improvement and self reflection and as the students also felt peer learning was an important aspect of learning outside of the classroom, this was also included. The students were required to discuss these concepts in the context of creating a revision toolkit that would help others to be more effective in their independent learning, in particularly preparing for the summer exams. It is hoped that the toolkit will help to banish some preconceptions students might have about what independent learning and effective revision truly is. As the students were mostly left alone during this phase limited observations were made however on one occasion, Miss P and Miss T were enjoying the early spring sunshine to discuss the role of peers and reflection in independent learning. Although this wasn't captured by me explicitly, it is hoped that their conversation was captured by the other students sitting enjoying the weather.

The creation of a resources/toolkit cognitively required the students to engage in many of the aspects of self regulation, for example, to review their own experiences of goal setting etc and to reflect on what may and may not have worked for them in the past. Although this was not mentioned I anticipate that the students will also try to think about what I

(as a teacher) would want including in the toolkit. Human nature means we can never truly eradicate social desirable behaviour within research, however if this assumption is made true, it can be seen as a positive inclusion of a benchmark or even a boundary to keep their conversations focused – a key characteristic of Fielding's (2004) 'students as co-researchers' element of the four-fold typology.

From the limited observations that were made of the students through this phase, it was clear that there was an excitement and enthusiasm about the task; they would praise each other about ideas for the booklet. For example LM praised Jay's idea of setting a task that will fit into the time it takes to listen to one album. I must admit, an excellent way of getting students to think about shorter tasks rather than unrealistic ones such as revising for four hours continuously.

To hear the students discussing learning and what worked for them was a real insight, not only from a professional research point of view, but also from a personal point of view. Often we come across students who believe they are too 'cool' to learn, but whilst watching these students get excited about producing this for their peers was uplifting. Jay in particular was a joy to watch; this long haired student is often seen on college campus strumming the guitar, discussing with friends the next rock festival he will be attending and to an outsider he may come across as not the typical student who would engage in a discussion about learning. But he did, and he did so in such a way that could be inspirational to others.

Please see appendix d for examples of the resources the students made for the toolkit.

'Can thoughts be changed?'

Following on from the active engagement the students were re-interviewed to identify if their thoughts on independent learning and those essential learning skills had changed. The first observation to report on is the overwhelming change in tone of the students' response, it was clearly much more positive. When asked about their views on goal setting the students were able to give much more focused and specific answers. For example, *"I really use this in my revision, especially since the programme for example by the end of the week I need to review two studies"* (Jay) and *"I find goal setting useful so that I can organise and know what I need to do next for my revision"* (Miss P). This more structured approach to goal setting also reflected in their time management for example, *"I feel my time management has become better because of my goal setting"* (Jay). However this wasn't the case for all as (WB) still felt that *"I do it but not very successfully because of distractions".* Regardless, for this individual in particular he did seem to show a shift in the way he viewed self reflection , especially in regards to using the specification as a guide to what he needs to know, as he commented *"Self reflection helps me to see what I can do well"*. Similarly (LM) commented that *"self reflection helps me know what to revise next"* and (Bam) commented that *"Self reflection/self monitoring are good because it shows you where your strengths and weaknesses are"*

So it would seem that for the short-term at least, the active engagement and the explicit discussions about self regulated learning have had a huge impact on these learners and how they approach their revision. This is further highlighted when asked about what strategies that they are currently employing in order to prepare for their summer examinations, *"goal setting, time management and self reflection I use, purely because I find them effective for me"* (Jay), *"goal setting and using my specifications"* (WB) and *"mainly self reflection"* (LM).

When asked which they feel most important the students did vary in their responses however all concepts were covered. There did seem to be some consensus that goal setting was important. All of the males included on this project wanted goal setting to be explicitly taught to them. For example when asked how teachers could build the development of the skills into the lessons (WB) commented *"If they give good examples of what you could target for would help "*. This seems to support the findings of Niemivrita (1997) who argues that boys are more inclined towards performance goals.

 One of the most important observations made at this point was when Miss P was asked about what she feels is most important in regards to the skills and she replied, *"Goal setting, in order to feel rewarded and positive when you meet your 'realistic' goals."* Her optimistic response was in complete contrast to the initial interview she gave where she came across as having little belief in herself and clearly lacked confidence in her own view of her own learning.

The students generally felt that programmes such as this should be provided at the start of the academic year so that they can develop the skills throughout the duration of the course. They felt that this could have guided more of their learning and allowed them to be more productive in their approach to their studies.

Finally, the students were asked about the whether they felt that there was confusion about the language used to refer to learning outside of the classroom. There was an overwhelming response of yes there is. I gathered the students together and asked them to come up with a phrase which they think us, as a college, should use in the future. 'Beneficial Learning' was their decision and this became part of the name for their revision toolkit.

Since the programme the students have changed the strategies they use, before it was reading over their notes passively whereas now a variety of tools are used. They seem to understand *why* it is important to use these structured strategies which is evidence of a different educational culture they have stepped into. The fact that their answers are all different suggests that independent learning is an individual thing and as teachers we can only provide them with a bank of tools and the students then choose which one suits their own personal learning needs.

Conclusions

In summary, this project has identified that students do want to engage in effective learning. They are aware of the expectations of them however the confusion and the ambiguity of the language used often means that their learning outside of the classroom is not as productive as it could be. However engaging in projects such as this will allow learners to become metacognitive as they are able to address different learning strategies and enter a different educational culture which will allow them to develop a more expansive approach to their studies. The mere process of engaging the learners in the production of the toolkit made them think about all of those concepts that are crucial to the success of independent learning. They had to consider how they manage their time, how they need to be organised, how they would self reflect and monitor. Giving the students the ownership of a resource, that will be used by other students in their year, got them excited and enthused about independent learning. This in itself is a strategy to be employed. Empowering the student and asking them what they think about learning to learn will be something that I do every year. Asking students to design and take control of how they should structure their revision or homework tasks will be avenue which I will continue to pursue. One can argue that although there was positive feedback from other learners in regards to the actual finished product of the toolkit (see appendix E), the actually production of it and the discussions about it was more beneficial in itself.

Although it would seem that the results of this project indicate a shift in the minds of the learners involved, we must also consider that this may only be a short-term effect. If the students are to proceed beyond this point, it is important that their teachers ensure that cognitive self-regulation is an explicit educational target. In other words, there is a need for long-term intervention for the development of lifelong independent learning. Yet in order for this to happen the promotion of independent learning necessitates a whole-college approach. This requires the support of senior managers and all teachers. At my workplace I am fortunate to be able to do this as the vision of the leadership team is student centred and the introduction of an academic tutorial system will allow me the flexibility to address the concepts outlined in this paper. However for others this may not be the case. In the event of such, simple changes to your own teaching practices can be done to begin the motion and maybe the changes you make can be evidence enough for senior management to see the impact that building independent learning skills into the curriculum, can have. (See appendix E for ideas and recommendations)

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Appendix A:

An overview of the areas of discussion within the initial interviews

The students were encouraged to talk about:

- Independent learning – what it means to them
- What do they currently do in regards to independent learning?
- What strategies do they use when preparing for exams or formative assessments? (e.g GCSE's/January mocks)
- What do they think about the following (key aspects of the successful independent learner)
  - Goal setting
  - Time management
  - Self reflection
  - Employing specific learning tool (e.g. knowing the specification, memory improvement techniques, organisation, setting your own questions)

Pintrich's (2000) model

Phase 1 – Planning: goal setting

Phase 2 – Self monitoring: organisation/knowing the specifications/memory improvement techiniques

Phase 3 – Control: time management

Phase 4 – Evaluation: reflecting on your work

Appendix B:

Additional questions included in the second semi structured interview.

1) Have you build any of these strategies named above into your revision schedules for the summer exams? If so which ones?
2) Which of the above strategies do your feel is the most important and why?
3) How can teachers build these into classes?
4) Which of the strategies needs to be considered at the start of the year, if any, and why do you think this?
5) Do you think that the activity you've done for this project (discussing independent learning and strategies and designing a toolkit) should be done at the start of the year for all students? If so why?
6) What phrase do you think teachers should use to refer to revision, independent learning, consolidation of notes, assignments done outside of the classroom?

Appendix C:

Supplementary findings

Qualitative Findings: Phase 4

'Can the thoughts of others be changed?'

During revision sessions the revision toolkit was distributed to AS students to work through. The teacher of the session talked through the concepts and explained how to complete the tasks. This was done as an introduction to the revision session. At the end of the revision session the students were asked to comment on the strengths and weaknesses of the toolkit.

Examples of responses were as follows:

Strengths	Weaknesses
• The rating/reflection activity was really useful to identify areas to focus revision • Front cover appealing • Layout is good and clear • Like the idea of reflecting on learning • Goal setting a good idea – will be really useful • Good tips – will use • Like the idea of revising with friends • It's very beneficial and has lots of good, informative details on how to revise • It was good and helpful. Lots of different ways I can revise- the time management thing helped me to plan not only revision time but also when I can see my friends • Good techniques that are helpful and useful • Good I like the booklet and I will find it useful • Good setting goals of what to revise and timetables of when to revise • A great help to my learning • I think this will definitely help me to organise my revision • Will help students who need tips on how to revise effectively • Helps me to think about how I can break down my revision • Peer learning should be encouraged more as it was highlighted in the book	• Would prefer it in colour • More pictures • A4 booklet next time • Room so I can make more notes • Some wouldn't use the social networking idea

In summary,

Students were positive about the booklet, they felt that the reflection activity was incredibly useful to guide their revision; it helped them to recognise what areas they are stronger with and what areas they need to focus more on. The teacher of the revision session also commented on the reflection aspect of the toolkit, "I think that the reflection aspect was very good. I will certainly be encouraging my students to do this from the start of the year".

However the actual production of the toolkit is probably more effective than the use of it by others. So therefore my suggestion would be that ALL students produce their own revision toolkit and ALL students continually log and reflect their learning outside of the classroom.

Further sharing:

(Students to staff)

Unfortunately the project deadline came before dissemination to staff could be commented on. However it is intended that the students involved in the project will run a workshop with staff to show and tell their work. This dissemination strategy was inspired by the recommendations Fielding (2005) put forward. Fielding argues "the most important aspect of the transfer process form the partner standpoint is that it should be, if not learner-led then learner-engaged". In other words the transfer of good practice will be more successful if the recipients, i.e. the learners, are involved in the transfer activity. This will hopefully eradicate some of the issues transferring good practice can bring. For example, from my own past experiences of running CDP sessions with fellow colleagues, there often seems a resistance to even listen to what is being said, never mind taking on board the strategies that are offered. A look of discontent can often be seen coming from the faces of those recipients attending such sessions and even more concerning is the look of fear on the providers face. Therefore it is hope that using the students will be more successful in transferring the good practice, after all it is their work and their ideas that must be spread.

(Students to students)

An idea for future research may take the form of students transferring their knowledge to other students in a workshop style session. This could be a passing down of skills from AS and A2 and would certainly make for an interesting research project.

Appendix D:

The revision toolkit

Appendix E

Recommendations

There is an assumption that the teachers make about their students; that all students know the specification, after all it's what we've been teaching all year and we did go through it at the start of the year, and it is referenced in their booklets, however it comes to light they know about it but don't know how to use it. Maybe using the specification specifically in sessions about independent learning is needed continually throughout the year to ensure that students understand the potential it has in guiding learning and revision schedules.

More specifically the following are some ideas that may help in raising the awareness of the essential self regulated learning skills needed to be successful in independent learning.

- **Teach them the basics and begin a project:**
  - At the start of each academic year there should be an introduction to an ongoing project where students address the essential skills of learning outside of the classroom. Core aspects such as using the specification to reflect and set targets should be included throughout the life of the project.
  - Explicit sessions on reflection and target setting should be encouraged throughout **but** the specification should be the at the core of this so that students can use it in the future and take responsibility on what they are learning about
- **Agree the vocabulary:**
  - Within the college setting there should be an agreement in regards to the vocabulary used to refer to learning outside of the classroom. Have a lesson that is focused solely on the language of learning. Ask them what they think about in regards to terms such as independent learning, reflection, setting goals etc. Agree what language will be used within the classroom. This session could also progress into specific language associated with your course, e.g evaluate, outline, discuss etc.
- **Encourage peer learning from the start:**
  - Peer learning outside of the classroom should be encouraged and supported throughout the year. This can be initially implemented at the start of the year in regards to the project. Students do like to learn together so encourage it. Facilitate a learning buddy system where students work together on homework or research assignments. Most recently I found that students who write an essay together (that being a paragraph each in sequence) are more likely to stay on task than if they were to do it alone. This may have implications for individual formative assessment and may therefore need to be done outside of this domain.