



# What impact, if any, does the Application we produced for Advanced Higher French have on the development of independent learning skills?

Judith McKerrecher, Edinburgh

## Research focus



Metacognition has a critical role to play in influencing the development of skills for independent learning: "It may be the major factor in determining the effectiveness of individuals' attempts to learn another language" (Chamot & O'Malley, 1994:372). Mobile technology can offer valuable opportunities in terms of the development of skills in self-direction and managing one's own learning (White, 2004:2). With the national requirement for the use of ICT across the curriculum and for the development of skills for work and lifelong learning, it is vital that if we are to combine the two, as in with the French app, we need to ensure we get the process right. However, learners also need to be ready and have the skills to access and progress their learning in this way" (Hattie, 21:127) and while it is the responsibility of the teacher to "help learners achieve metacognitive awareness and skills, to act as counsellor and to withdraw gradually as learners become more independent"(Holec, 1995:189), learners need to have a clear understanding of how they learn and what they need to do to learn effectively if they are to make real progress. Flavell defines metacognition as embracing both knowledge and skills: "The individual's own awareness and ability to monitor and regulate strategies for learning, including planning, prioritising and monitoring" (1997:232). These strategies are included in the development of the app.

**My aims** are to ascertain whether learning in this way has an impact upon the development of the students' skills for independent learning, try to find out if they had more of an understanding about their skills for independent learning by the end of the course and explore whether they felt they were better able to use their skills as a result.

Before the enquiry, we were looking at how we could support AH learners to access their course digitally.

Before sharing this method with other schools in the authority, we need to ascertain how effective this means of learning is to AH learners and how it can be effectively managed and monitored by teachers.

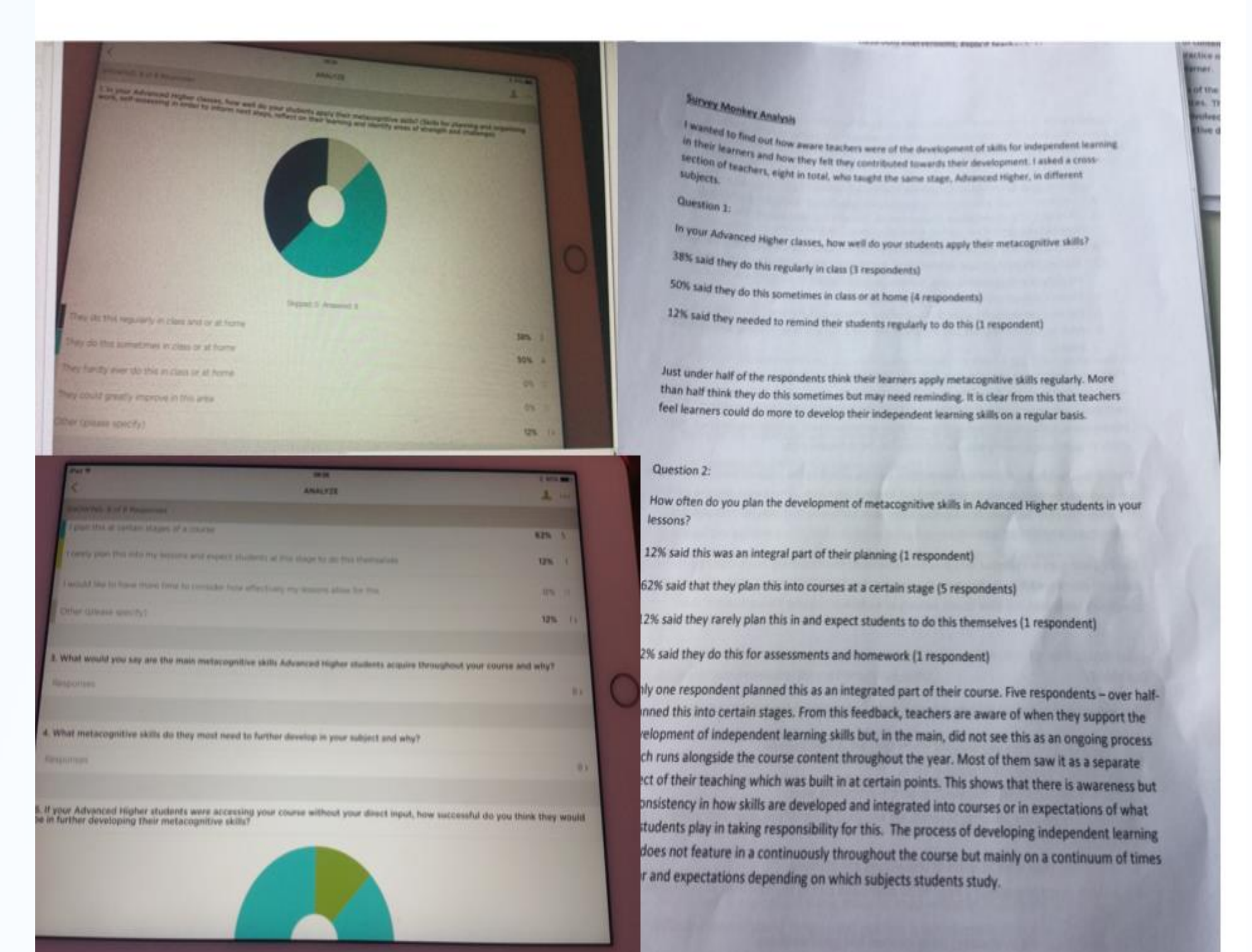
## Outline

In line with national priorities we must ensure we prepare learners for life beyond school and support them in the development of skills for lifelong learning. Although I have always tried to support learners in identifying and developing their skills for independent learning, I have never designed or facilitated a course using technology and the use on an app. I have little experience of the impact learning via mobile technology has on the metacognitive process. I wanted to explore this in order to better understand how learners develop their skills in this way and how much more support is required. This enquiry was started in my role as Curriculum Leader for Modern Languages in Edinburgh and involved a Local Authority Pilot with a group of Advanced Higher French learners. The group had each been given an I-pad for the session in order to access their course on I-Tunes U. With the support of the city Digital Learning Team, teachers in the department were trained in how to construct an app for the course. The enquiry was carried out across session 2014/15 and involved four AH French learners in my school.

## Findings/presentation of data

From a survey monkey of 8 staff from other subject areas at AH, teachers did not see the development of skills for independent learning as an ongoing process which ran alongside course content throughout the year, but rather as a separate aspect of their teaching which was built in at certain points. Teachers identified planning and organising as the independent learning skills they felt learners developed most in their courses but half of respondents identified knowing where learners are in their learning was a skill which still needed to be developed – this included self-assessment, reflection and self-evaluation. Three quarters of respondents indicated that their learners only reflected upon their learning and planned for improvement when they were asked to do so.

Figure 1. Example of Survey Monkey Analysis



The data appears to evidence that over half of the teachers asked did not have these skills as an integral course component and felt that learners could do more to develop their skills.

## Methods

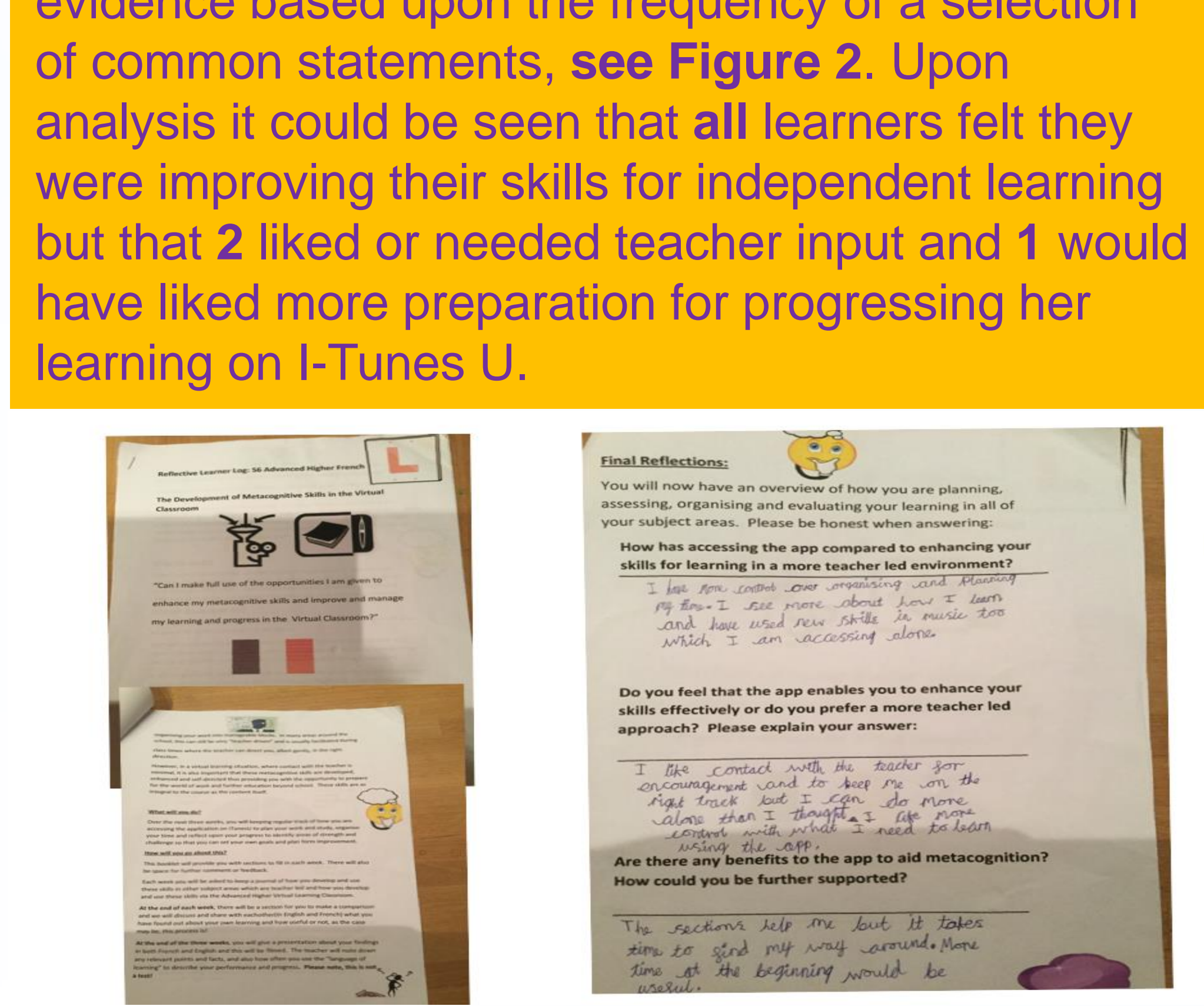
A baseline was obtained by interviewing learners in October 2014 about their understanding of skills for independent learning and how often they felt they used them. Learners rated their understanding and use of skills on a scale of 1 – 10. In December, a survey monkey was issued to staff who taught other AH subjects to ascertain the focus they place upon developing these skills in their courses. I was looking for an idea of the experiences learners had in other subject areas and, due to its anonymity, this allowed for honest responses. Learners were asked to keep a log of their learning in AH French over a three week period. This was to help them to reflect, and I was looking at how their skills were developing. Recorded interviews (10 questions) were made in April. The first two questions were, again, asking them to rate their understanding and use of skills for independent learning on a scale of 1 – 10 and this was compared to the baseline data. Each response was transcribed and analysed individually, summarised collectively and presented as statements and in chart form. I was looking for frequency of skills mentioned and progress in understanding and use of skills. I also had the predicted final grades for future comparison (see analysis).

Figure 2. Example of learner log statements

- a. I am improving my organisation and time management. (4)
- b. I have taken more control of my own learning. (4)
- c. This is giving me the chance to see how I learn. (4)
- d. I am developing my skills constantly because I can access the app. (4)
- e. I like the style of a teacher teaching me but the app is a good extra (2)
- f. I can see how I am transferring these skills to other subjects but I still need my teachers for encouragement. (1)
- g. I feel I could have had more preparation for learning in this way. (1)
- h. I feel this is aiding my learning and I am moving forward with it.(4)

The statements indicate that progress is being made in skills and understanding of learning but importance of the teacher and preparation time are highlighted.

Figure 3 Copy of learning log: I gathered evidence based upon the frequency of a selection of common statements, see Figure 2. Upon analysis it could be seen that all learners felt they were improving their skills for independent learning but that 2 liked or needed teacher input and 1 would have liked more preparation for progressing her learning on I-Tunes U.



## Analysis and Interpretation Discussion

Evidence indicates a positive shift in understanding and using skills for independent learning (Figure 4 charts 1&2), but it must be stressed that this is partly based upon learner perception, and the focus only involved four learners. Final grades were as expected in 3 cases(A,B,C), but in the 1 case they were not (D instead of C), the speaking grade had impacted overall performance. The importance of the role of the teacher was obvious in learner interview responses and in learning logs (Figure 3). This would concur with Vygotsky's theory (1978) which involves explicit teacher led instruction, modelling and guided practice of metacognitive strategies. Preparation for progressing learning using the app was also highlighted by 1 of the learners (Figure 2,g). This is upheld by Hattie who states that learners need to be trained in order to access their learning in this way and time is required to ensure adequate skills are developed (21:127).From my research, it is clear that just because learners are at the stage of Advanced Higher, it does not mean they are adept at understanding or using skills for independent learning. Donaldson emphasises that metacognitive development is not as dependent upon age as experience (2010) and our own interventions. Ongoing dedicated support and training is needed throughout school education and across subjects. Recognising where they were in their own learning using the app was the skill learners found most challenging to develop (Fig 5, 3). This was also the skill other AH teachers identified for development in their courses (Fig 1). It would appear that learners became more aware of their skills and how and when they used them, and were better able to reflect due to the app's flexibility and ease of access(Fig 2,4). The impact seems to lie more upon their awareness and understanding rather than their development and application of skills for independent learning(Fig 4,1).

Figure 4. Charts 1 and 2 illustrate recorded interview data. Individual responses were recorded, transcribed and analysed

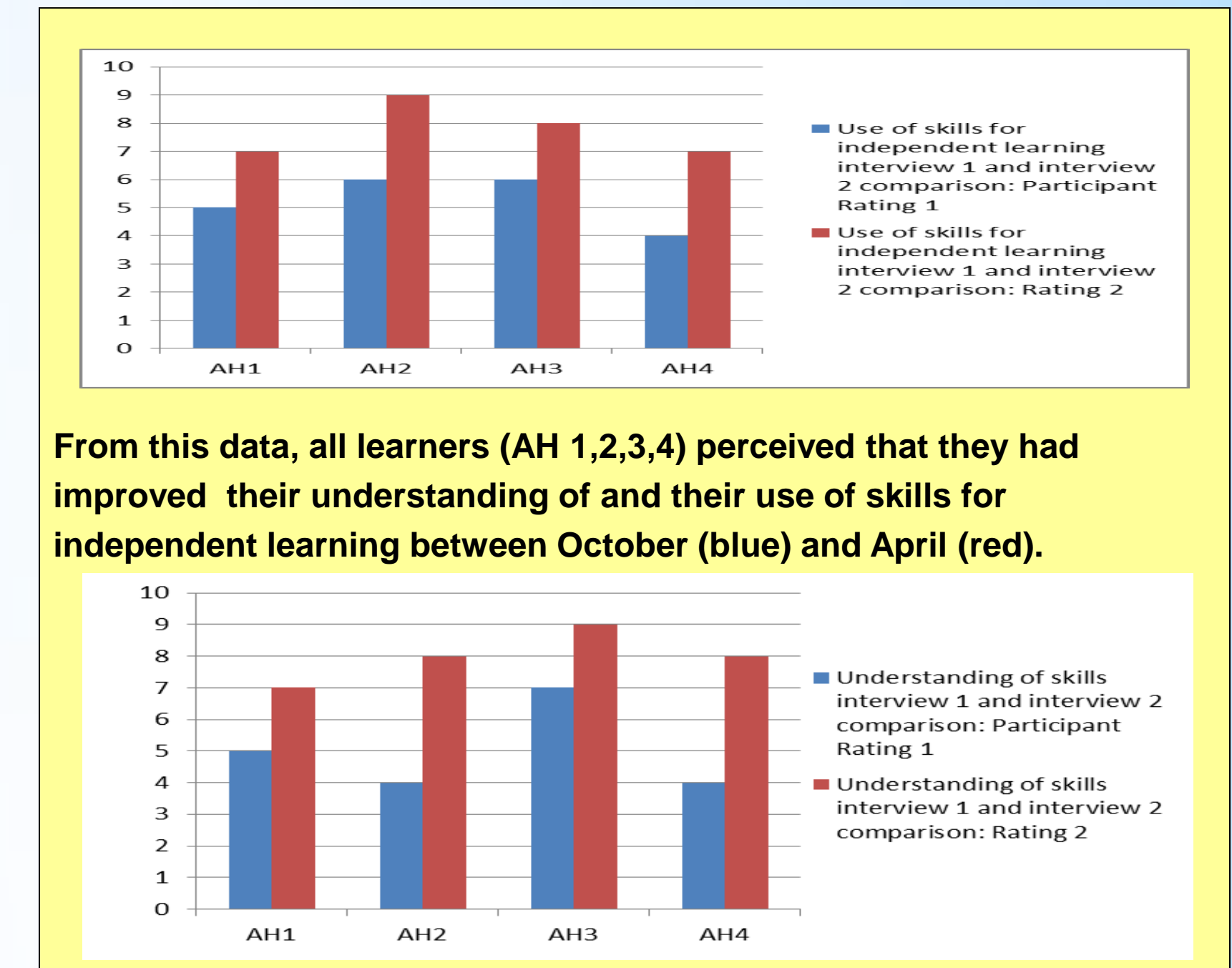
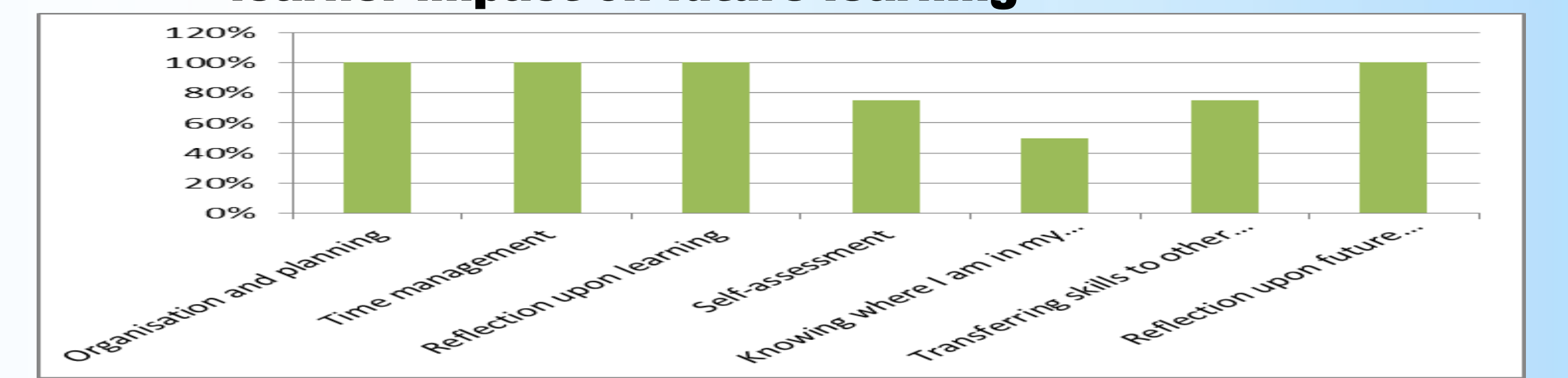


Figure 5. Chart 3: skills developed, ability to transfer to other subject areas, perceived learner impact on future learning



There has clearly been progress in how learners perceive their understanding of skills for learning and how they use them (Figure 4). In their interviews, all learners made reference to the flexibility afforded by being able to access the app at any time and select the sections they felt they most needed. All learners felt they had improved in organisation and planning, time management and reflecting upon learning(Figure 5, chart 3). However, only two were confident about identifying where they were in their learning (Figure 5, chart 3). I noticed that this concurs with the results of the teacher survey monkey in which it is felt that learners still need to develop this skill(Figure 1, Survey Monkey). One learner felt she had not transferred her independent learning skills to other subject areas (Figure 5, chart3). This was the same learner who indicated a strong reliance on a teacher led environment in her interview (Figure 2, e). All learners claimed this style of learning made them reflect upon future learning and what it will be like to progress their learning to further education (Figure 5, chart 3).

## Final Thoughts

The question as to whether the app has had an impact upon skills for independent learning is difficult to answer at this stage. Although a range of evidence was sampled, I was not in school to oversee the completion of learning logs so feedback varied depending upon learner. I relied greatly upon learner perception and honesty. I had started leading the pilot as CL in the department but the course was subsequently overseen by another teacher when I took up a seconded post. The teacher reported that the app had positively impacted the way she taught and she is now modifying it to facilitate the new AH course. Introducing this means of enhancing learning has also enabled me to develop another app to support teachers in my current role. It was rewarding to find out that most learners were recognising how they were transferring skills to other subjects and that they had become more aware of their learning. All learners felt that thinking about their learning while accessing the app would help them in future learning contexts (Fig 5, 3). This was reassuring to hear. However, next steps would be to have more planned preparation for learners for accessing learning in this way, further support for speaking preparation and more reflection upon my own interventions in supporting the development of skills for independent learning using the app as an ongoing process throughout the course. More research based upon the next steps of these learners and their future learning beyond school is necessary to gain a better, reliable insight into the impact of the app on their skills. **FUTURE**

References: O'Malley, J.M. & Chamot, A.U (1990) Learning Strategies in Second Language Acquisition. UK: Cambridge University Press  
 Hattie J, Yates G (2013) Visible Learning and the Science of How We Learn. UK: Routledge  
 Flavell, J (2001) Cognitive Development. UK: Pearson  
 Donaldson M (1978) Children's Minds. UK: Harper Collins  
 Vygotsky, L.S (1978) Mind in Society. USA: Harvard University Press  
 Hurd, Stella (2008) Second Language Learning at a Distance: Metacognition, affect, strategies and learner support

