

The Use of iTunes U with Advanced Higher French Learners: Impact on the Development of Independent Learning Skills

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Abstract: Increasingly, digital learning is being used in classroom practice to enhance learning experiences. In this small scale enquiry I investigated, using quantitative and qualitative data, the impact of using an app on the development of Advanced Higher French learners' skills for independent learning. The research also explored how the use of mobile technology can impact (positively or negatively) on learners' metacognition within the context of Modern Languages, and its importance in the development of independent learning skills. The findings suggest that while learners enjoy the flexibility afforded to them by accessing their learning via app, the role of the teacher and the training of both teacher and learner are essential if the learning is to be effective. Attention also needs to be given to how skills for independent learning can be developed effectively both before and during the course. The role of metacognitive ability is pivotal here and opportunities for metacognitive development need to be integrated into course content.

Keywords: Skills, Independent learning, Metacognition, Training, Reflective Logs, iTunes U

Background to Study

Metacognition has a critical role to play in influencing the development of skills for independent learning. Flavell (1979: 223) 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". Chamot & O'Malley (1994: 372) even argue that "It may be the major factor in determining the effectiveness of individuals' attempts to learn another language". Mobile technology can offer valuable opportunities in terms of the development of skills in self-direction and managing one's own learning (White, 2006:247). In line with national priorities teachers must ensure that they prepare learners for life beyond school and support them in the development of skills for lifelong learning.

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 & Yates 2013:127). Furthermore, while it is the responsibility of the teacher to "help learners achieve metacognitive awareness and skills, to act as counsellor, helper and facilitator, and to withdraw gradually as learners become more independent" (Hurd 2008: 30), 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. Through a small scale research project I sought to ascertain

the impact of four Advanced Higher French learners' use of the app on the development of independent learning skills. As part of a Local Authority pilot, the four learners were given an iPad for the session and teachers were offered training on how to construct an app on iTunes U. The app was created to incorporate skills for independent learning into the various sections, in the first instance by myself with support from the City of Edinburgh Council Digital Learning Team and then, throughout the session, with additional input from the Modern Languages team at a semi-urban secondary school. The sections were constructed as follows:

- an introduction about how to plan and structure work
- feedback and next steps sheets to encourage reflection
- a progress and self-evaluation chart along with the pegged marking schemes and criteria for self-assessment and peer assessment
- a guide to maximising success throughout the year to help prepare for exams

Throughout the year, students had continual access to these sections whenever desired and were encouraged to explore and select the sections they needed most at any given time.

My aims were to ascertain whether learning in this way had an impact upon the development of the students' skills for independent learning, try to find out if they had an improved 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.

Research Question and Data Collection Methods

The research question was: What impact, if any, does the Application we produced for Advanced Higher French have on the development of independent learning skills?

In order to gather evidence, a triangulated approach was taken to obtain both quantitative and qualitative evidence. 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. They were also asked to keep a log of their learning in AH French over a period of three weeks. This was to help them to reflect, and I was looking at how their skills were developing.

In December, an online survey was issued to staff who taught other AH subjects to ascertain the focus they place upon developing these skills in their courses in order to gain an idea of the experiences learners had in other subject areas and, due to its anonymity, this allowed for honest responses.

Additionally, for the learners, semi-structured interviews were set up and recorded (10 questions) in April 2015. The first two questions asked learners 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. The other questions and student responses are illustrated in [Appendix 1](#).

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.

Discussion of Findings

Analysis of Online Survey

I wanted to find out how aware teachers were of the development of skills for independent learning in their learners and how they felt they contributed towards their development. I asked a random cross-section of teachers, eight in total, who taught the same stage, Advanced Higher, in different subject areas and in different schools. Their responses are summarised in **Table 1** below:

Table 1: Summary of Teacher Responses

Question	Question focus	Most frequent response	(n=8)
1.	Teachers' perception of how frequently AH students apply metacognitive skills in class	Sometimes	4
		Regularly	3
2.	Degree of teachers' planning for the development of metacognitive skills	At a certain stage of my lesson	5
3.	Teachers' perception of AH students' ability to develop metacognitive skills on their own	Students would cope some of the time but would require support	7
4.	Teachers' perception of when AH learners reflect on their learning	When they are asked to do so	6
5.	Teachers' perception of main metacognitive skills acquired by AH students throughout courses	Planning work	6
		Organising work	5
		Self-assessment	5
6.	Teachers' perception of skills AH students still need to develop throughout courses	Students need help identifying where they are in their own learning and in planning their own progress	4

Comments on Responses to Question 1:

Just under half of the respondents think their learners apply metacognitive skills regularly. More than half think they do this sometimes but may need reminding. It is clear from this that teachers feel learners could do more to develop their independent learning skills on a regular basis.

Comments on Responses to Question 2:

Only one respondent planned for the development of metacognitive skills as an integrated part of their course. Five respondents – over half- planned this into certain stages. From this feedback, the majority of the participating teachers seem to be aware of when they support the development of independent learning skills but, in the main, did not see this as an ongoing process which runs alongside the course content throughout the year. Most teachers saw it as a separate aspect of their teaching which was built in at certain points. This suggests that there is awareness but no consistency in

how skills are developed and integrated into courses or in expectations of what role students play in taking responsibility for this. The process of developing independent learning skills does not feature continuously throughout the course but mainly on a continuum of times of year and expectations depending on which subjects students study.

Comments on Responses to Question 3:

None of the teachers thought their students would be able to cope alone when accessing their courses, but most of them thought they would cope some of the time and would still require teacher support. One respondent raised maturity and training as being a potential issue. Teachers indicated that, even at this stage, they think that students are not ready to be fully independent in their learning.

Comments on Responses to Question 4:

Three quarters of respondents indicated that their learners only reflect upon their learning when they are asked to do so. This evidences the responsibility teachers still feel in helping students in this area and the reliance students still have on their teachers. In the main, they still await instruction and direction to reflect upon their learning and to plan for improvement.

One respondent indicated this varies depending upon the student. All learners are different and at this stage, the level of independence students are happy to take and demonstrate inside and out with the classroom will depend upon a range of factors such as confidence, independence generally and intrinsic motivation.

Comments on Responses to Question 5:

Planning and organising were the main skills identified as being developed in courses. These skills were identified by six and five of the respondents respectively, more than half of respondents in each case. Self-assessment was also highlighted by half of the respondents. Planning for improvement, self-evaluation and setting next steps were mentioned by three respondents. The ability to work independently was also mentioned by three respondents.

Overall, teachers had identified the independent learning skills they felt students developed most in their courses. Planning and organising stand out amongst the replies. Self-assessment was the next most apparent skill identified by teachers. This begs the question whether students may have developed these naturally in any case as is the nature of courses at AH level. However, teachers were not identifying any of these skills as being completely integrated into their course delivery as a whole or ongoing throughout the year.

Comments on Responses to Question 6:

Half of respondents identified knowing where students are in their learning as a skill which still needed to be developed – this included self-assessment, reflection and self-evaluation. Planning and organising work were mentioned but to a lesser extent which would complement answers in the last question. One respondent felt all skills for independent learning still needed to be developed.

The importance of reflection and identifying where learners are in their own learning is particularly important here given the nature of the courses and independence required at AH level. This was a skill highlighted by half of the respondents for development and was most popular as a response to this question.

Analysis of semi-structured interviews with Advanced Higher Learners:

As mentioned earlier, learners were asked to rate their understanding of skills for independent learning on a scale of 1 to 10 before and after the course. The code names AH1, AH2, AH3, and AH4 stand for Advanced Higher Candidate 1-4 respectively. **Figure 1** and **Figure 2** illustrate how students rated their ‘understanding skills for learning’ and their ‘use of skills for independent learning’ in October 2014 and April 2015 respectively. The responses indicate all learners perceived that they had improved their understanding of and their use of skills for independent learning by the time of the second interview.

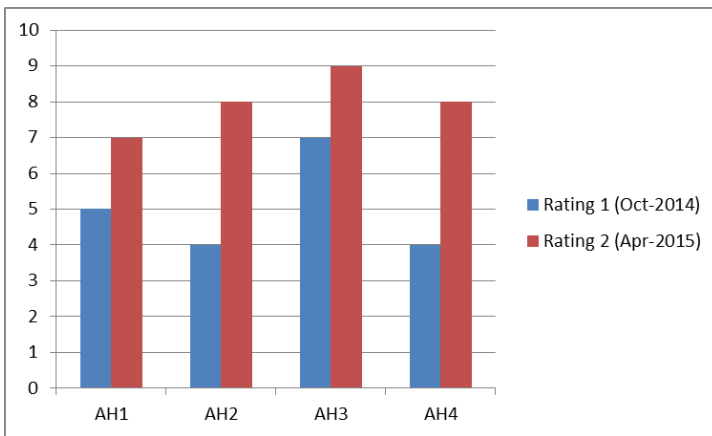


Figure 1: Rating comparison for 'Understanding Skills for Learning'

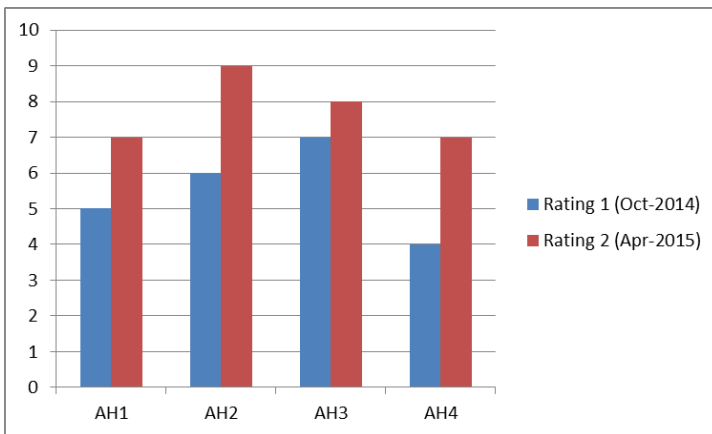


Figure 2: Rating comparison: 'Use of skills for independent learning'

Figure 3 below illustrates the skills learners felt they had most developed, where the blue bar represents the number of learners who identified with each skill:

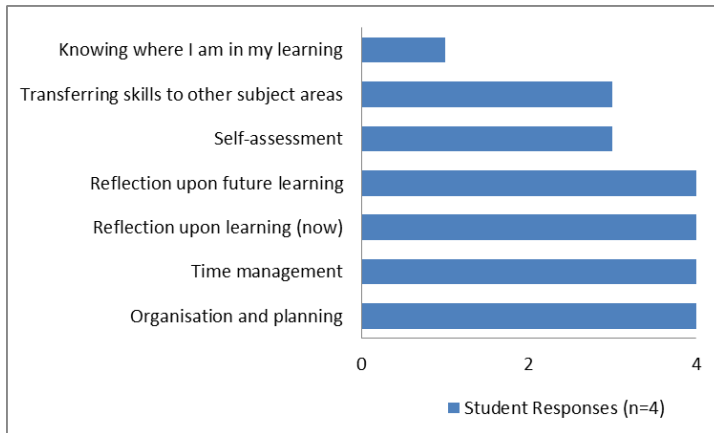
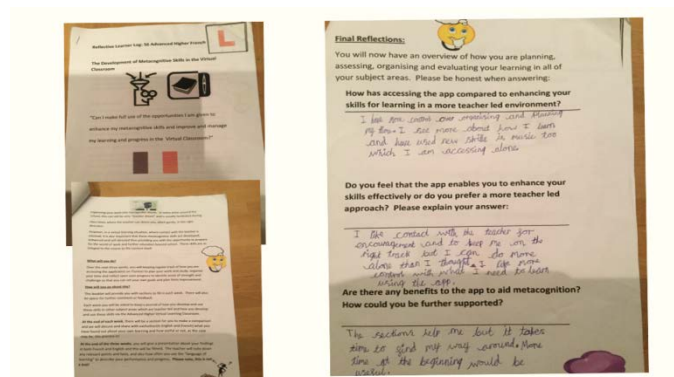


Figure 3: Perceived impact on students' skill development

The responses suggest that there has been progress in how learners perceive their understanding of skills for learning and how they use them. 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. However, only two were confident about identifying where they were in their learning. This concurs with the results of the teacher online survey in which it appeared that learners still needed to develop this skill. One learner felt she had not transferred her independent learning skills to other subject areas. This was the same learner who indicated a reliance on a teacher led environment in her interview. 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 and to the world of work.

Reflective Learning Log

I gathered evidence based upon the frequency of a selection of common statements made by the learners in their reflective learning logs.



The student responses are summarised in **Figure 4** below:

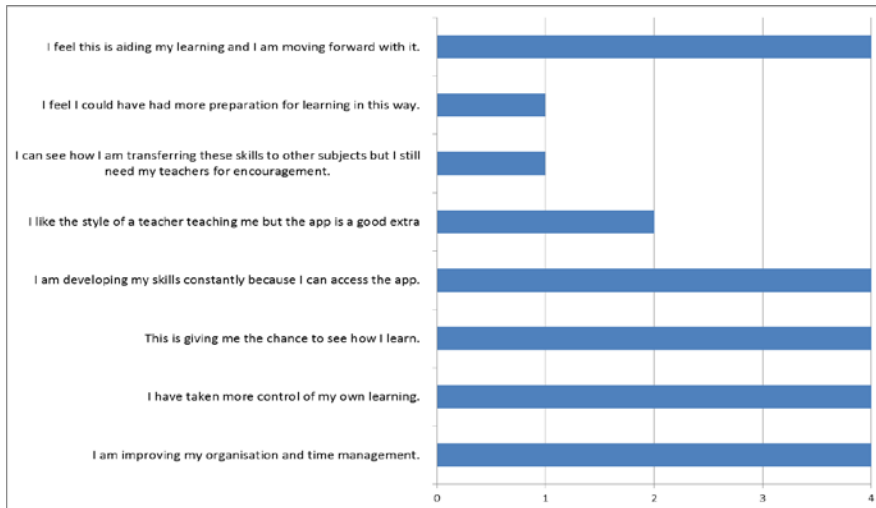


Figure 4: Student responses (n=4)

The statements indicate that progress is being made in skills and understanding of learning but the importance of the teacher and preparation time are highlighted. Upon closer inspection we see that **all** learners felt they were improving their skills for independent learning but that **two** liked or needed teacher input and **one** would have liked more preparation for progressing her learning on iTunes U.

Evidence indicates a positive shift in understanding and using skills for independent learning but it must be stressed that this is partly based upon learner perception, and the focus only involved four learners. The importance of the role of the teacher was obvious in learner interview responses and in learning logs. This would concur with Vygotsky’s theory (1978: 127) which involves explicit teacher led instruction, modelling and guided practice of metacognitive strategies. Preparation for being able to effectively progress their own learning using the app was also highlighted by one of the learners. This is upheld by Hattie & Yates (2013) who state 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.

From this 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 (1978) emphasises that metacognitive development is not as dependent upon age as experience 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. This was also the skill Advanced Higher teachers identified in the online survey for development in their courses. 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. The impact seemed to lie more upon their awareness and understanding rather than their development and application of skills for independent learning.

Conclusions

It must be emphasised that there are limitations to the research gathered. The sample size was small and was located in one school. The start of the authority pilot coincided with the beginning of my seconded post at the Confucius Institute for Scotland's Schools. Having been the first teacher in the department to participate in the training of the development and delivery of a course using iTunes U, there were inconsistencies in approach when the leadership fell to another teacher. However, in light of the evidence gathered, it is useful to highlight similarities and differences in perceptions between teachers and learners as summarised in **Table 2** below:

Table 2: Comparison of Teacher and Student Responses

Researcher Perception	Teacher	Student
Planning and organising were skills students most developed in AH courses	Agreed	Students also improved greatly in reflecting upon learning and were better able to think about their learning using the app
Students are better able to navigate technology than teachers	Not agreed – when it comes to course content, students need to know how to access the work and use the course effectively	Not agreed – two of the students indicated they needed teacher support and emphasised the importance of the role of the teacher
Teachers only build the development of skills for independent learning into course content at certain points and not as an integrated part of their usual courses	Agreed – there is not a consistent approach to how metacognition is developed or our own interventions across authorities, sectors or subject areas	Not agreed in this case – all students felt they were developing skills for independent learning constantly because of the flexibility of the app
The app cannot not replace the teacher but is an effective enhancement to the support given by the teacher	Agreed – teachers indicated that students would cope some of the time accessing a course alone but would need support	Agreed by three out of four students who liked the style of having a classroom teacher and the encouragement they received
Students need to develop a better sense of where they are in their own learning in order to plan next steps	Agreed by four out of eight teachers	Agreed by two students who felt they still needed to develop this skill. However, two felt they were now better able to do this due to accessing the app
More time for training required	Agreed by teachers using app	Agreed by students using app

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, due to the opportunity to take up a seconded position, 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 Curriculum Leader in the department but the course was subsequently overseen by another teacher. The teacher reported that the app had positively impacted the way she taught and she is now modifying it to facilitate the new Advanced Higher course. Introducing this means of enhancing learning has also enabled me to develop another app to support teachers in my current role.

From a survey of eight staff from other subject areas at Advanced Higher level, 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 that “learners knowing where they 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. This gave me a general indication of the expectations teachers had of their learners and the experiences learners were having across subjects and across schools.

From the semi-structured interviews, it was clear that most learners were recognising how they were transferring skills to other subjects and they had become more aware of their learning. Pleasingly, all learners felt that thinking about their learning while accessing the app would help them in future learning contexts.

However, next steps would be to have more planned preparation of learners for accessing learning in this way, further support for speaking preparation that are accessible via mobile technology, and more reflection upon 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.

Learners had very much appreciated the opportunity to access the app at their own convenience and to focus upon the sections they found were most useful to their own learning at a given time. They also liked the independence this type of learning afforded them out with the classroom although the role of the teacher is definitely essential in ensuring adequate preparation for accessing a course in this way. The teacher also needs to feel fully confident in how to construct, update and monitor the app and ongoing support for both teacher and learner is vital, especially in the initial stages or in a pilot project.

The focus of this research was based around the impact upon the development of skills for independent learning. It would be interesting to look beyond this to the wider benefits and challenges of accessing a course in this way. There would certainly also be opportunities to develop critical, analytical and research skills by accessing learning by using this method.

Recommendations:

Given the findings which culminate from the evidence gathered, I would make the following recommendations for future learning in this way:

1. Ensure teachers involved in the delivery of a course in this way are all trained and feel confident.
2. Before beginning such a course, build up its use to learners and give plenty of time for training in the run up to using it.
3. Involve parents and seek feedback at regular points throughout the course.

4. Set up an effective means for learners to submit assignments and for receiving effective, useful feedback.
5. Do not add the whole course content at the very beginning. Update the coursework at regular intervals ensuring learners are aware of when to expect this and deadlines are clear.
6. Set up a discussion forum between learners and teachers.
7. The app can be used in a variety of contexts and, once familiar and confident with how to use it, teachers can share professional learning, ideas and resources to create new apps.
8. Metacognition is essential in the acquisition and development of skills for independent learning. There needs to be dialogue across sectors and consistency and knowledge in how to support learners in the development of metacognitive awareness and ability from an early age.

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Appendix 1: Student responses to semi-structured interview

Which of the skills do you feel you have most developed and why?	All four learners said the skills they had most developed were in planning their work, time-management and organisation. They also reported having more of an awareness of what to work on for exams and the usefulness of the i-pads in planning for progress in their other subjects as well as French.
How do you feel about the development of your skills in AH French in comparison to other subjects?	Three of the learners mentioned the level of teacher support in their other subjects and that the more support and lead from the teacher, the less responsibility they felt for developing their skills for independent learning. One learner expressed the preference for teacher support and direction in all subjects.
Has using the app in a virtual learning environment helped you to transfer the independent learning skills you were developing in French to other subjects?	Three of the learners mentioned that they had been able to transfer the skills they had developed for independent learning in French to other subjects. One learner still felt reliant on the teacher to help her to see the skills she was able to develop and transfer.
Have other subjects allowed you to place as much focus upon the development of your independent learning skills as AH French?	Only one student mentioned opportunities throughout the year to focus upon the development of independent learning skills in another subject and this was a self-access course. One student indicated that it was only during periods of revision that she felt she was able to apply more skills for independent learning. All learners felt they had the opportunity to take charge of their own learning throughout the year in French and this had helped them to develop more skills for independent learning.
Which skills do you feel you could better develop and could the sections of the app be enhanced in order to allow for this?	Three of the learners did not mention how the app could be enhanced to better support the development of their independent learning skills but talked about the skills they had already made progress in developing. They all mentioned self-assessment and knowing where they are in their learning as a skill they wished to further improve. One learner would have liked more support with the inference question in the reading paper and felt exam technique advice could have been more evenly distributed over each section of the app rather than being contained in just one section.
Do you feel there is an advantage in learning this way for your future learning or work?	Three students mentioned how useful this way of learning will be to their future at university. They mentioned that they now felt more aware of what was to come. One student was unsure how learning this way would be an advantage to her future learning. The same student had also accessed the app the least and still felt reliant on the teacher.
Have you noticed your own progress as a direct result of using the app?	The students were able to talk about their progress to varying degrees. One student could see clearly where her understanding had improved but not necessarily her performance/attainment. Two students mentioned specific elements of the course the app had helped them to improve upon. One student talked about her progress more generally and could see that her whole approach to learning and planning for progress had improved. She mentioned the choice within the app afforded her to do this.
Do you feel this was the right stage for you to learn via virtual classroom and do you feel you would have benefited from earlier preparation?	All of the students felt ready to learn in this way. One of the students felt she would have benefited from more preparation prior to commencing the course in this way.

