Research

Research into new evaluative tools, such Infinity Learning Maps, is urgently needed to understand the nature of future-focused learning from the students' perspectives. By tracking student perspectives with the use of positive psychology, it is possible to capture the narratives of student's personalized stories of the way they choose to improve their learning situations.

A research project was conducted during a national trial of Infinity Maps with over 300 students in 20 schools from February to June 2015. The aim of the research was to report the value of the mapping exercises from the perspectives of the participating students, teachers and parents (Annan, Annan, Wootton & Burton, 2016).

See full research report
http://bit.ly/FullResearchActiveLearningThroughInfinityMaps

Three overarching findings.

➢ Students, teachers and parents considered that the Infinity Mapping process was useful for examining and extending the students' current learning environments and supporting their active involvement in learning.

➢ The process encouraged student agency and adjusted the agency of teachers and parents.

➢ Strategies selected by students to address their change priorities shifted from routine, traditional practices to those that supported active, personalized and future-focused learning.

The study took place over a four-month period. Students, teachers and parents came together three times for the students to draw, redraw or revise their Infinity Learning Maps and to plan and discuss changes to their learning environments.

Method

Students completed three Infinity Maps over three months (one map each month) and entered their data into an online database within the Infinity website as they worked through process. Students captured their Infinity Learning Maps digitally, videoed their discussion about their Infinity maps and noted the people, places, tools and relationships that supported their learning. They also set change priorities, listed the actions they would take and recorded their progress in making the changes.

Teachers and parents made comments on the students' information and noted the actions that they would take to help their child or student achieve their goal.

In addition, more detailed data were collected through student, teacher and parent focus groups and a survey was conducted with all participants regarding the perceived usefulness of Infinity Learning Maps. Information was collected after the first and last mapping sessions.

Findings

On a scale of one (no value) to four (very helpful), the findings below show positive patterns in all three participant groups, that is students, teachers and families.
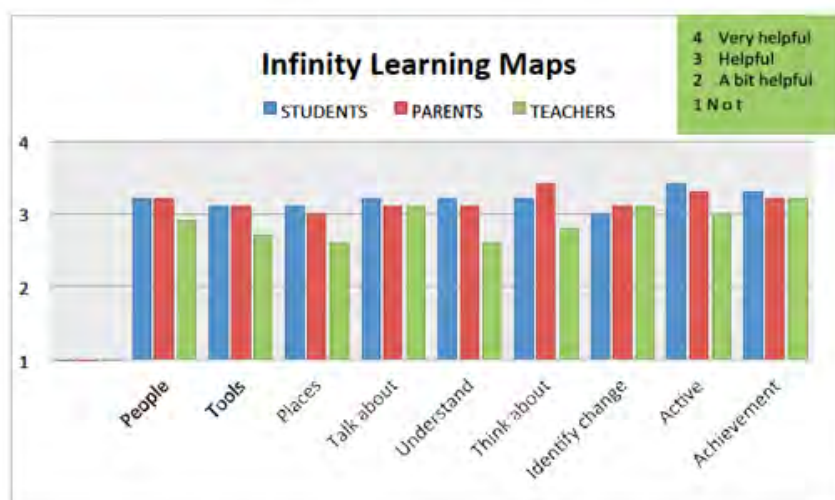
Value of Infinity Maps process

Figure 1. Perceived helpfulness of the Infinity Learning Maps to support specified learning.

Students

- Students sought to become active learners and to share responsibility for directing their learning.
- The majority of students addressed their change priorities or were 'nearly there'.
- Strategies they selected at the third and final mapping session involved developing learning relationships and extending their learning environments in contrast with the baseline strategies of managing tasks and practicing.

Quotes from students

"I usually help others. I used to tell them the answer. Now I go through things step by step with them. I also learn from them by seeing what strategies they use."

"I learn at lots of places, do activities everyday - music helps with math, guides help with crafts and math, school, library, museum to learn history, learn from hockey, computer coding class."

Quote from a student about his Mum's support: "Mum used to tell me, now she gives me clues or helps me think about where I could find out."

Teachers

- The nature of the strategies used by teachers started with the provision of additional exposure to schoolwork (e.g. longer time or more of the same) and monitoring.
- By the end of the project, teacher strategies had generally shifted to supporting students to co-construct new strategies, connect with other people and engage in personalized learning.

Quotes from teachers

> *"It is about changing perceptions, getting to know students and families and how they are connected to each other"*

> *"Noticed that the kids are more engaged"*

> *"Confidence in some has increased. [they are] more switched on to their learning"*

> *"Kids more articulate with each other about what they are learning outside of school"*

> *"Infinity Maps….reinforced the need to present students with opportunities to be independent and self-driven"*

> *Quote from a leader: "Infinity Learning Maps were the catalyst for change in our school"*

Parents

> Family strategies, initially involved general offers of help.
> Homework shifted from traditional tasks to an increasing focus on supporting active and personalized learning and providing feedback.
> Families indicated that preparing their children for a new and unknown future world was a high priority for them.

Quotes from parents

"[I] hadn't taken a step to think about how education had changed in schools yet, gave an opportunity to do that, to stop and think about how they learn"

"Work environments have also changed so why wouldn't it be different in schools?"

"Now more aware that interactions and sharing information are key to learning, learning outside of school and being explicit in highlighting it is an area for learning. Making connections between community situations and learning."

"Since Learning Maps I need to be a "guide on the side" and praise her for being an active learner."

Conclusion

Infinity Learning Maps have proven to be a useful tool to engage children and families in new and authentic learning partnerships with teaching professionals. They are also proving to be a useful evaluative tool for educators to assess the growth of student agency and the movement towards future-focused learning environments. These two innovations are contributing to new partnerships and new metrics, which are essential to address the education equity challenge.