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Evaluation of Pathways to Extreme
Success (PX2) in a Scottish
Further Education College

Final Report | December 2010



BE ALL YOU CAN BE

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FOREWORD

The “Be All You Can Be” project was a partnership that involved Cumbernauld College, East Dunbartonshire Council Psychological Service, the Volunteer Centres in East Dunbartonshire and North Lanarkshire, University of Dundee, Forward Training and the Pacific Institute.

A grant was secured from the Kelvin Valley Leader programme that contributed towards forming a self-sustaining infrastructure by initially training and supporting staff members from partner organisations to deliver structured PX2 programmes and measuring the effectiveness of this type of intervention in reducing barriers for young people in accessing valuable learning opportunities.

The PX2 product is based on a sound psychological theory base and is designed to instil self confidence, strong self belief, character building and positive goal setting. To enable this to be facilitated, six college and five partner staff embarked on an eight day training programme to ensure the sustainability of the project.

The Pacific Institute propose that PX2 totally revolutionises learning for young people in a way that is immediately engaging, exciting and attractive with an “MTV” feel. PX2 combines fresh and current imagery, music and graphics with a taught element, and introduces a “Video Jockey” at the beginning and end of each STEP of the programme.

The project had three evaluation strands which were training the trainers, the PX2 materials and the impact on the learner. The evaluation of the project ran in tandem to the training and tested the effectiveness of an intervention that is designed to promote social inclusion and commitment to education and progression. Independently evaluated by East Dunbartonshire Council Psychological Service, it also provided the focus for a thesis for a postgraduate MSc Educational Psychology student at the University of Dundee.

The pilot PX2 has now been mainstreamed and the trained staff now cascade the delivery of the PX2 training to other groups within our wider communities. Be All You Can Be embeds the characteristics that are related to The Scottish Government’s Curriculum for Excellence and the More Choices, More Chances strategy. The programme provides opportunities for learners between 16 – 19 years to have flexible, tailored individual support to enable them to focus on their aspirations and goals.





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SUMMARY

This report describes research undertaken as part of a wider collaborative project, 'Be All You Can Be', which emerged from partnership working between staff from East Dunbartonshire Psychological Service and Cumbernauld College.

The main aim of the research was to provide an independent evaluation of Pathways to Extreme Success (PX2), a new programme developed by The Pacific Institute (TPI) and aimed at 14-19 year olds.

An extended term mixed method (ETMM) evaluation model (Chatterji, 2004), with three research strands, was utilised to evaluate the facilitators' training (Strand 1); the PX2 materials (Strand 2); and the impact of PX2 on a target group of students participating in a Get Ready for Work programme (Strand 3).

Strand 1 focused on the participants' evaluation of the training both from a personal perspective and from the perceived relevance for their clients. This training comprised 2 compulsory elements: Investment in Excellence (IIE) training and PX2 training. Thirteen adults, representing 4 different agencies, completed IIE training. They reported benefits in terms of their personal development and application to their everyday lives. Eleven adults, representing 4 different agencies, participated in PX2 training. These trained facilitators were very positive about the relevance and perceived benefits of the programme for the young people they work with.

Strand 2 focused on an evaluation of the materials used in the PX2 programme drawing on the views of participating students and their facilitator. Sixteen students, attending the East Dunbartonshire Campus of Further and Higher Education and enrolled on the Get Ready for Work programme, participated in the PX2 programme. At the end of the 2 week period of implementation of PX2, 14 of these students completed the programme evaluation questionnaire and participated in the facilitated group discussion. A reflective diary was kept by the member of staff who delivered the PX2 programme to the students in the East Dunbartonshire Campus of Further and Higher Education. Although overall the PX2 students and their facilitator were very positive about the programme, they recommended a number of improvements.

To measure the impact of PX2 on participating students, a quasi-experimental and mixed methods approach was utilised. The intervention group comprised 16 students who went through the PX2 programme instead of the usual Get Ready for Work (GRfW) Programme completing the 12 STEPS at a pace of two STEPS per day over a two week period. Prior to participation in the PX2 programme, 14 students (8 males and 6 females) met with the second author to complete various measures. Eight weeks later (6 weeks after completion of the 2 week programme), the same researcher met with 9 of the original 14 students to repeat these measures. The attrition of participants was due to students gaining employment or leaving the GRfW course. The comparison group comprised 11 students (3 males, 8 females) who met with the second author to complete the pre measures. Eight weeks later the same researcher met with 6 of the original 11 participants to repeat the measures. The attrition of participants in this case was due to some students gaining employment or currently being on a work placement. At the group level, in terms of impact, the PX2 group outperformed the comparison group by

THE MAIN AIM OF THE RESEARCH WAS TO PROVIDE AN INDEPENDENT EVALUATION OF PATHWAYS TO EXTREME SUCCESS (PX2), A NEW PROGRAMME DEVELOPED BY THE PACIFIC INSTITUTE (TPI) AND AIMED AT 14-19 YEAR OLDS.

increasing their scores and obtaining a higher score overall for optimism. The PX2 group also demonstrated an enhanced approach to goal attainment and appeared to have more confidence in their abilities to achieve their goals. At the individual level, gains achieved through PX2 may become more apparent over time based on subjective reports about PX2 effects. It appears at this level that those for whom PX2 has had an effect it has worked well. For those for whom it appeared that no had change occurred, it is suggested that the individuals did not engage with the programme or struggled with the language and level of the programme.

To assess the longer term impact of the PX2 programme on the GRfW students, information on student destinations, 9 months following completion of the programme, was obtained from college staff. Information was available on 12 of the 16 students who had participated in the PX2 programme. These findings provide a very positive picture in terms of positive destinations.



INTRODUCTION

1.1 The Pacific Institute (TPI)

The Pacific Institute (TPI) was founded in 1971 by Lou and Diane Tice with a presence in 6 continents and 60 countries throughout the world (Pacific Institute (TPI), 2009). The guiding principle of TPI is:

That individuals have a virtually unlimited capacity for growth, change, and creativity, and can adapt readily to the tremendous changes taking place in this fast paced, technological age. Central to this is that individuals are responsible for their own actions, and can regulate their behaviour through a simple structured process that includes goal setting, self reflection and self evaluation. (TPI, 2009, p.3)

Over the years, TPI has developed a number of personal development programmes for children, young people and adults that are designed to help individuals reach their fullest potential as outlined in this guiding principle.

1.2 Pathways to Extreme Success (PX2)

Pathways to Extreme Success (PX2) is a 12 step personal development programme for young people aged 14-19 years which superseded the Breakthrough to Excellence programme. It is designed to help young people understand how their mind works, in terms of their self-beliefs and attitudes, and how this influences their future. Through engagement in the programme, participants learn that they are in control of the way they think and that they have the power to change their lives (TPI, 2009).

The materials include a glossy and attractive workbook and a trendy DVD designed to appeal to young people in this age group. The programme is delivered through activities, group discussion, and facilitator led reflective questioning. This approach aims to suit all learning styles, through the use of activity based exercises, visual materials, and group discussions.

Although PX2 was developed originally in the USA, it has undergone further development and refinement in the UK, through a process of consultation with young people and facilitators, and piloting between January-April 2009 (Oliver, 2009). At the time of the official Scottish launch in Glasgow in December 2009, there were thought to be around 200 trained PX2 facilitators in Scotland. The programme has been delivered in a range of contexts, including Further Education (FE) colleges, youth agencies, national training programmes, and young apprentice schemes. Four thousand young people had completed the PX2 programme in the UK with projected forecasts of 125,000 by 2011-2012 (Oliver, 2009).

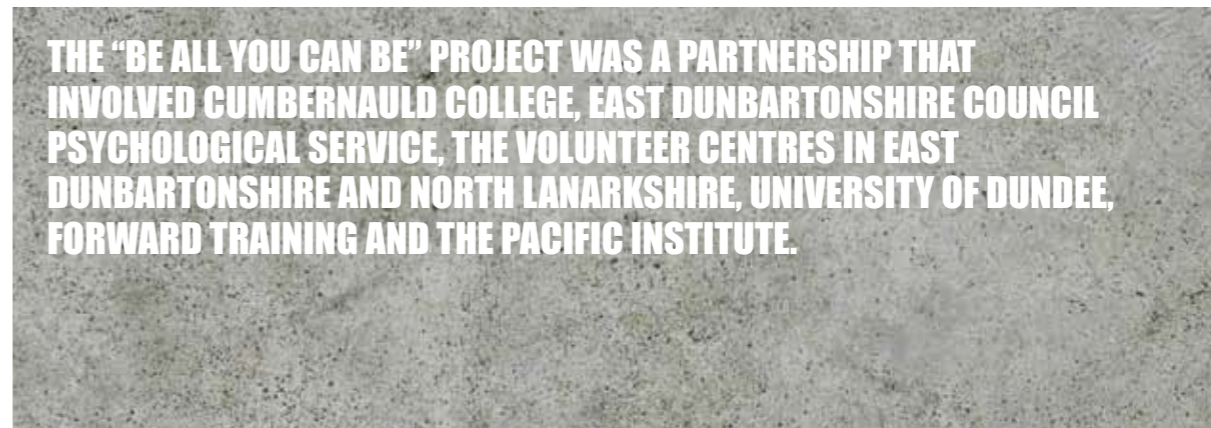
Akin to other Pacific Institute programmes, PX2 draws on theoretical perspectives from cognitive psychology, positive psychology and motivation. In terms of cognitive psychology, the programme aims to create 'cognitive dissonance' (Festinger, 1957), whereby an individual's ideas, behaviours, attitudes, and beliefs about themselves are challenged. This creates an uncomfortable feeling which encourages the individual to think about his/her position, and subsequently alter or change his/her beliefs to recreate harmony between their thoughts and behaviours. PX2 encourages the young person to build on their new thoughts and experiences to develop a sense of control over his/her life and to develop self-efficacy. This is informed by Bandura's social cognitive theory which posits that efficacy can be strengthened in four ways: through mastery experiences; social modelling; social persuasion; and perception of physical and emotional states (Bandura, 1997). Individuals with greater self efficacy are generally more optimistic; can overcome challenges; and have confidence in their coping abilities to overcome life's challenges (Schoz, Gutiérrez-Doña, Sud, & Schwarzer, 2002).

The PX2 programme incorporates positive psychology approaches, defined by Seligman (the founder of the positive psychology movement) as the "scientific study of optimal human functioning [that] aims to discover and promote the factors that allow individuals and communities to thrive" (Bonniwell, 2008, p.1). Positive psychology covers many areas including the study of psychological well being; motivation and goal theories; happiness and well being; positive coping; resilience; strengths and virtues; and resilience (Bonniwell, 2008, p.2). This mirrors the guiding principle of TPI programmes that individuals have an unlimited potential to grow and can change and adapt to increase positive areas of their lives.

1.3 Evaluations of Pacific Institute Programmes

There is some research evidence regarding the efficacy and effectiveness of TPI programmes.

Evaluations of 'Steps to Excellence for Personal Success' (STEPS) have been extremely positive (May, 2007; Oldham Children's Fund, 2006). May (2007) evaluated the STEPS programme with 19 disabled young people (aged 16 plus years) and obtained very positive results, with the young people reporting that they felt their lives and outlook on life had changed as a result of the STEPS programme. These gains were maintained over a three month period. The Oldham Children's Fund (OCF) (2006) study evaluated the impact of the STEPS programme with a sample of 46 parents. There were statistically significant findings with regard to increases in self esteem; decreases in depression and anxiety; and increases in overall well being and resilience. The parents were extremely positive about the course and the perceived personal impact.



Studies of the Breakthrough to Excellence' programme undertaken in the UK provide evidence that participation leads to increases in young people's psychological well being, self esteem and locus of control (Gorvett, Nobel, Proudfoot, & Reeves, 2000). In a Glasgow study, involving three groups of young people at risk of becoming NEET (Not in Education, Employment or Education), the facilitator reported that there were improvements in the participants' confidence and self worth and there was increased engagement in terms of participation in group discussions and activities. The participants reported that the programme had made them feel more positive and confident; more in control of their lives; and better able to plan and set personal goals. Furthermore, they indicated that they intended to use the ideas from the course. In terms of longer term impact, tracking of the participants a number of weeks after completion of the course showed that all were in positive destinations and none had become NEET (The Scottish Training Foundation (STF), 2008).

Prior to commencement of the current project, the PX2 programme had not been subject to an independent evaluation. Internal evaluations conducted by TPI using their standard evaluation questionnaire have produced very positive results. In a summary report, collating the findings from 101 PX2 participants, individuals reported that they found the full range of concepts interesting; a high proportion considered PX2 to be of use to them in a variety of settings; and 87% stated that they would recommend PX2 to a friend (TPI, 2010). At the Scottish launch of PX2 in December 2009, there were presentations on the 'Be All You Can Be' project

and the Raising Aspirations project in North Lanarkshire. The latter project was targeting a cohort of third year secondary school students in one school; with PX2 being delivered during personal and social education classes. A mixed methods approach was being used to assess the perceived impact on the pupils (self esteem, well being, confidence, resilience, educational attainment, and health behaviour) and their environments (aspects of home life, social interest, family supports, and progress of change) (Schooler, 2009). At the Scottish launch, the Pacific Institute representatives stated that these were the first external research evaluations and the most rigorous to date (Oliver, 2009). TPI also proposed the establishment of an international centralised research bank in South America.

1.4 Research evaluation 'Be all you can be' project

The research evaluation formed a key component of an external funding bid for the 'Be all you can be' project and comprised both process and outcome elements (Robson, 2002). This enabled a focus both on assessing the impact and value of the programme; and on considering ways of improving the implementation of PX2 in a Further Education context. A specific evaluation model, the Extended Term Mixed Method (ETMM), informed the research design providing both formative and summative feedback (Chatterji, 2004). The characteristics of this research design are presented in Table 1.

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Table 1 Five characteristics of the ETMM evaluation design

1. Use of a long term research plan, deliberately tracking the course of a programme or intervention over relevant parts of its life with formative and summative results.
2. Use of systematic, contextually grounded studies in early phases followed by more sharpened, analytic experimental/quasi –experimental studies in later phases of the research.
3. Deliberate study and documentation of environmental variables as a component of the research plan.
4. Combined use of more than one research method, uncovering of patterns and deepening understanding of relationships and causality.
5. Explanation of causality based on both empirical and substantive knowledge gained on the programme and its setting.

The utilisation of ETMM informed the three strand research design reflecting the stages of formative and summative feedback over the duration of the project (Figure 1 and Table 2). This model also influenced the decision to utilise a mixed methods approach, incorporating both quantitative and qualitative methods.

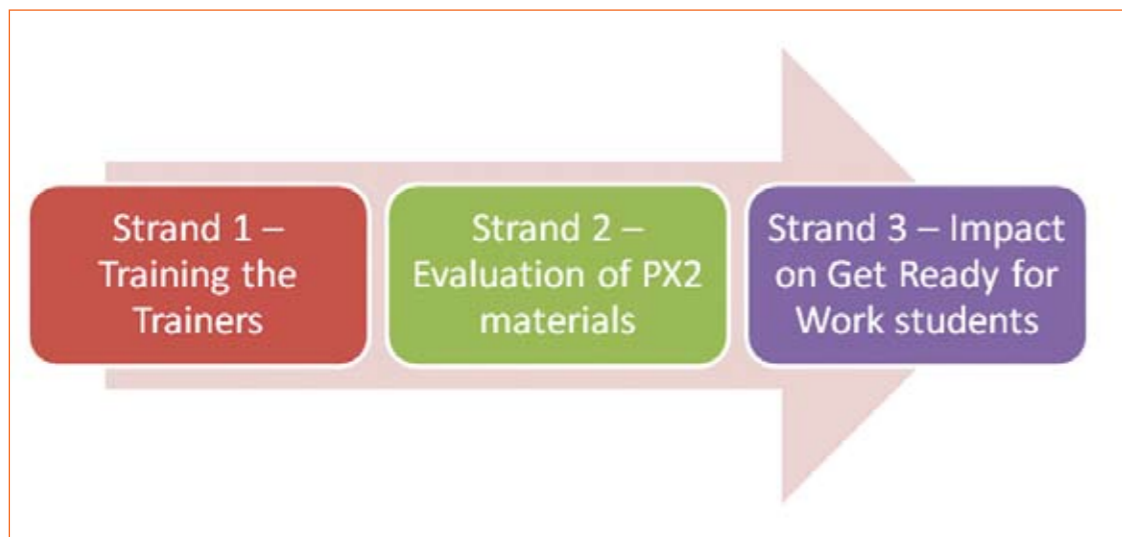


Table 2 Overarching research design for the ‘Be all you can be’ project

- Strand 1 ‘Training the trainers’**
 This was the first stage in the research process whereby the training provided by TPI for IIE and PX2 were evaluated. The IIE training was evaluated for the professional development and personal growth of the participants. The PX2 facilitator training was evaluated for the applicability of the programme to the client group; the facilitators’ confidence in delivery of the programme; and the projected benefits for the students. The findings from this strand provided formative feedback and recommendations for the implementation of the PX2 programme via the steering group where identified barriers could be overcome.
- Strand 2 ‘Evaluation of the PX2 materials’**
 This strand was felt important to the evaluation process due to the recent development of the programme and also to investigate its applicability to Scottish FE college students/adolescents. This strand of the evaluation would be used to inform future PX2 deliveries within the college setting.
- Strand 3 ‘Impact of PX2 on the Get Ready for Work students’**
 This strand aimed to investigate the impact on the students after a six week period after the PX2 had been delivered to provide summative evidence of the efficacy of the PX2 programme.

The specific research questions for the three strands are outlined in Figure 2.

INTRODUCTION



Figure 2 Research Questions for the Three Strands

METHODOLOGY

2.1 Participants

2.1.1 Strand 1 Training the Trainers

Investment in Excellence (IIE) Training

Thirteen adults representing 4 different agencies participated in IIE training. The breakdown by agency and frequency is illustrated in Table 3.

Table 3 Agency involvement in IIE training

Agency	Number of staff trained
Cumbernauld College GRfW	5
Educational Psychology	3
Cumbernauld College Non GRfW	3
Voluntary sector	2

Staff who participated in IIE training were employed by agencies and services operating within East Dunbartonshire and North Lanarkshire. The majority of individuals worked for Cumbernauld College and were involved in Get Ready for Work programmes. It should be noted that Cumbernauld College comprises the main campus and the East Dunbartonshire Campus of Further and Higher Education.

Pathways to Extreme Success (PX2) Training

Eleven adults representing 4 different agencies participated in PX2 training. The breakdown by agency and frequency is illustrated in Table 4.

Table 4 Agency involvement in PX2 training

Agency	Number of staff trained
Cumbernauld College GRfW	4
Educational Psychology	3
Cumbernauld College Non GRfW	2
Voluntary sector	2

All 11 participants in PX2 training had completed IIE training. Two members of staff from Cumbernauld College (one involved in GRfW and one not involved in GRfW) did not complete PX2 training at this juncture.

2.1.2 Strand 2: Evaluation of PX2 Materials

Sixteen students, attending East Dunbartonshire Campus of Further and Higher Education and enrolled on the Get Ready for Work programme, participated in the PX2 programme. During the 2 week period of implementation of the PX2 programme, their involvement in the Get Ready for Work (GRfW) programme was suspended.

Programme evaluation questionnaire and facilitated group discussion

At the end of the 2 week period of implementation of PX2, 14 of the 16 students completed the programme evaluation questionnaire and participated in the facilitated group discussion. Two students were not available to take part in these 2 activities

Evaluation questionnaire at the end of each individual STEP (12 STEPS) of the programme

The number of students who completed each individual STEP ranged from 10-13. This would be due to absences on particular days (with the programme being delivered at a pace of 2 STEPS per day over 6 days).

Facilitator's reflective diary

A reflective diary was kept by the member of staff who delivered the PX2 programme to the students in the East Dunbartonshire Campus of Further and Higher Education.

2.1.3 Strand 3 Impact of PX2 on Get Ready for Work Students

Pathways to Extreme Success (PX2) Get Ready for Work (GRfW) Group

Sixteen students went through the PX2 programme instead of the usual Get Ready for Work (GRfW) Programme completing the 12 STEPS at a pace of two STEPS per day over a two week period. Prior to the PX2 delivery, 14 students (8 males and 6 females) met with the second author to complete the pre test stage of the research.

METHODOLOGY

Eight weeks later (6 weeks after completion of the 2 week programme), the same researcher met with 9 of the original 14 students to administer the measures. The attrition of participants was due to students gaining employment or leaving the GRfW course. Of the 9 matched (pre/post) participants whose data was used for analysis there were 6 males and 3 females; they were all 16 or 17 years of age with a mean age of 16 years 1 month; and they had been on the GRfW programme between 1-26 weeks at pre test (mean = 8) and 8-34 weeks at post test (mean=16 weeks).

Comparison Get Ready for Work (GRfW) Comparison Group (C group)

In the comparison GRfW group (C group), 11 students (3 males, 8 females) met with the second author to complete the pre test measures. Eight weeks later the same researcher met with 6 of the original 11 participants to repeat the measures. The attrition of participants in this case was due to some students gaining employment or currently being on a work placement. Of the 6 matched participants whose data was used for analysis, there were 5 females and 1 male; all 16 or 17 years of age with a mean age of 16 years 6 months; and they had been on the GRfW programme between 3- 13 weeks at pre test (mean = 6.33) and 12-21 weeks at post test (mean =14 weeks).

2.2 Design

The five characteristics of an ETMM evaluation design are presented in Table 5 with a short description outlining how this study adheres to these principles.

Table 5 ETMM evaluation design and 'Be all you can be' project

<p>1. Use of a long term research plan, deliberately tracking the course of a programme or intervention over relevant parts of its life with formative and summative results</p> <p>'Be all you can be' project was funded for the period 1st August 2009- 31st October 2010 although this has been extended to 31st January 2011. The research component can be traced over a 20 month period from the development of the funding bid (February- April 2009); training the facilitators (August-November 2009); delivery of the PX2 programme (February 2010); evaluation of the delivery of the programme (February 2010); evaluation of the impact of PX2 on the students (March-April 2010) and longitudinal follow up of student destinations (October 2010). Research has been undertaken across all strands of the project. Throughout this whole process the research has involved a feedback loop through the steering group such that the progress of the research can be monitored and discussed. For example, during evaluation of the PX2 facilitators training, some concerns/barriers were raised about implementation of PX2 due to the roll-on-roll-off nature of the Get Ready for Work (GRfW) programme. This was fed back to the steering group/college management where discussions took place to freeze entry to the GRfW programme for a two week period to allow delivery of PX2.</p>
<p>2. Use of systematic, contextually grounded studies in early phases followed by more sharpened, analytic experimental/quasi –experimental studies in later phases of the research</p> <p>This research has involved a three strand process whereby information has been gathered throughout to inform the third strand of the research which was based on a quasi-experimental format designed to investigate the impact of the PX2 programme on the students. The earlier phases of the research provided contextual information; identified factors which were potential barriers to successful implementation; and identified steps taken to overcome these barriers prior to delivery.</p>
<p>3. Deliberate study and documentation of environmental variables as a component of the research plan.</p> <p>The researchers engaged in a range of activities to collect environmental information regarding the context for the project. In addition to collecting data in the early stages of the project from the facilitators about systemic issues and barriers to implementation of the programme, the researchers had close involvement with college management, the TPI trainer and other staff in TPI organisation. This was achieved through attendance at steering groups meetings, the Scottish launch of PX2, meetings with TPI staff, and e-mail and telephone communication. This enabled the researchers to gather views about the implementation of the programme and an increased understanding of the nature of the programme. The researchers were also conversant with funding and associated monitoring arrangements that had an impact on the project.</p>
<p>4. Combined use of more than one research method, uncovering of patterns and deepening understanding of relationships and causality.</p> <p>The evaluation utilised a mixed methods approach.</p>
<p>5. Explanation of causality based on both empirical and substantive knowledge gained on the programme and its setting.</p> <p>The researchers considered the findings in a reflective and reflexive manner taking account of contextual environmental information obtained throughout the investigation.</p>

2.3 Ethical Procedures

2.3.1 Ethical Approval

The second author, a trainee educational psychologist, followed ethical procedures as determined by the School of Education, Social Work and Community Education, University of Dundee. The first author and the second author (an educational psychologist employed by the local authority within which the research was undertaken) were bound by professional ethical codes, in particular the British Psychological Society (BPS) Code of ethics and conduct (BPS, 2009a); the BPS Ethical guidelines (BPS, 2004); and BPS Ethical principles for conducting research with human participants (BPS, 2009b). Both researchers had Enhanced Disclosure Scotland checks.

2.3.2 Permissions and Informed Consent

College management provided verbal consent for the college groups to be involved in the research and college staff determined which groups and facilitators would be involved. Informed consent (verbal and written) of the adult and student participants was obtained during the various phases of the research. As the students were over 16 years, they were viewed as capable of providing their own consent.

2.4 Procedures

2.4.1 Strand 1 Training the Trainers

Two activities were conducted with the adult participants who undertook the training to become PX2 facilitators. This training comprised 2 compulsory elements: Investment in Excellence training and PX2 training. IIE training was completed in 2 phases of 2.5 days and 2 days over the timescale 26th August 2009 to 24th September 2009. Similarly, PX2 training was completed in 2 phases, each of 2 days, over the period 11th November 2009 to 26th November 2009.

Development of IIE Questionnaire

The IIE questionnaire drew on questions included in the standard Pacific Institute evaluation questionnaire for IIE. As such, it explored respondents' views of the training; how helpful/useful it was; suggestions for improvement; and whether they would recommend the training to others in their service. However, of greater interest to the researchers was the perceived impact of the training, including such aspects as change in personal insights; change in behaviour (work and home); and change in perspective of working situation.

In design, the questionnaire comprised 18 questions with a mixture of open and closed questions (rating scales, multiple choice and dichotomous yes/no).

Administration of IIE Questionnaire

All participants were given an information letter/consent form. The IIE questionnaire was administered by the Pacific Institute facilitator, with supporting written guidance from the researchers, to all participants on the first day of PX2 training (11th November 2009). This was just under 7 weeks after completion of IIE training. The rationale for this timing was to allow the participants a period of time to reflect on the training and, in particular, the impact on personal development and the application of ideas/strategies in everyday life (home and work contexts).

Data analysis

The quantitative data were subject to analysis using SPSS and the qualitative data generated from responses to the open ended questions were subject to content analysis. The stages of data analysis are summarised in Table 6.

Table 6 Stages of data analysis

Stage 1	The two coders independently reviewed the collated responses for each question and produced a set of categories (using post-its to record ideas)
Stage 2	The two coders compared the list of categories and reconciled any differences.
Stage 3	The two coders used the consolidated list of categories to independently apply the coding system.
Stage 4	The two coders then compared findings, checked the inter-rater reliability of the coding and discussed discrepancies

METHODOLOGY

Inter-rater reliability was used to determine whether the developed coding system was being applied in a similar fashion by the two researchers. This involved adding up the number of recording units that were coded the same way by the two coders and dividing by the total number of recording units. Ninety-five percent agreement has been suggested as an acceptable level (Stemler, 2001).

Development of PX2 Questionnaire

The PX2 questionnaire was designed to address three research questions: What is the perceived applicability of the PX2 programme to the participants' client group? What are the projected benefits of the PX2 programme for the students? How confident are the trained facilitators in delivering the PX2 programme? The questionnaire comprised 17 questions with a mixture of open and closed questions (rating scales, multiple choice and dichotomous yes/no). The questionnaire incorporated standard PI questions and additional ones developed by the researchers. Aspects covered included the format and structure of the training; confidence in delivering PX2; relevance to the client group; ease of incorporation of the programme into current courses; and anticipated changes in the client group as a result of participation in PX2 programme.

Administration of Questionnaire

All participants were given an information letter/consent form. The PX2 questionnaire was administered by the Pacific Institute facilitator to all participants at the end of the training period (4 days in total). The PI facilitator was provided with written instructions for administration.

Data analysis

The quantitative data were subject to analysis using SPSS and the qualitative data generated from responses to the open ended questions were subject to content analysis. The stages of data analysis were outlined earlier in Table 4.

2.4.2 Strand 2 – Evaluation of the PX2 Materials

Three activities were conducted with the Get Ready for Work (GRfW) students who participated in the PX2 programme:-

1. Evaluation questionnaire following completion of the PX2 programme
2. Facilitated group discussion following completion of the PX2 programme
3. Evaluation questionnaire at the end of each individual STEP (12 STEPS) of the programme

One activity was conducted with the PX2 facilitator. Reflective diary of the twelve sessions commenting on the content and delivery of the programme.

Evaluation questionnaire following completion of the PX2 programme

Development of Questionnaire

The questionnaire completed by the students at the end of the two week programme was an adapted version, developed by the researchers, of that employed routinely by TPI for their evaluations of PX2. The rationale for utilising the same or similar questions was that it would enable the findings to be compared with previous end of programme evaluations conducted by TPI. It posed questions concerning how interesting the students found the programme; what concepts they found most interesting or useful; where they might use these concepts; what ways these concepts might help; what their goals were; how they planned to progress these goals; what the facilitator could have done to make the programme more interesting; and whether they would recommend the programme to a

friend. In comparison to the standard TPI evaluation questionnaire (Pacific Institute, 2009), the adapted version was less restrictive employing more open ended questions. It incorporated 8 questions; two rating questions (Qs1 and 8) and 6 open ended questions.

Administration of Questionnaire

The second author administered the questionnaire in a whole group setting to the students after they had completed all 12 STEPS in the PX2 programme, which was delivered over a 2 week period. The students were invited to ask any questions or to get assistance from the researcher as they completed the questionnaire. The researcher read the questions out loud and encouraged the students to refer to their PX2 booklets. This strategy was designed to address reliability issues due to potential recall difficulties.

Data analysis

The quantitative data were subject to analysis using SPSS and the qualitative data generated from responses to the open ended questions were subject to content analysis. The stages of data analysis were as outlined earlier in Table 4.

Facilitated group discussion following completion of the PX2 programme

Questions

The questions used for the facilitated group discussion were brief and solution focused in nature designed to investigate what the students liked and disliked about the PX2 programme. They were:

1. What went well? / What did you like about PX2?
2. What improvements would you like to see? / What didn't you like so much?
3. What's different about PX2 compared to Get Ready for Work?

These questions generated qualitative data that could be triangulated with the student's individual evaluations (using the end of programme evaluation questionnaire). The aim of this activity was to further explore the students' constructions. A limitation of the end of programme evaluation questionnaire (as for any questionnaire) was that it was not possible to interrogate the rationale behind particular responses. As such, it was hoped that this activity would provide greater insight into the students' views of the programme and would generate improvement suggestions.

Administration

After the students had completed the end of programme evaluation questionnaire, the second author facilitated a whole group discussion, lasting around 30 minutes, using flip chart paper to record the students' ideas. The researcher ensured that the recorded points accurately reflected the discussion. Levels of agreement and disagreement were recorded. The PX2 facilitator was present throughout the activity but did not participate.

Data analysis

Recorded points were subject to thematic analysis (Braun and Clarke, 2006) by the second author. This was undertaken separately for each question in the discussion activity. An inductive approach to data analysis was employed.

Evaluation questionnaire at the end of each individual STEP (12 STEPS) of the programme

Construction of questionnaire

The purpose of the individual STEPS questionnaires was to provide an immediate evaluation of the perceived utility of each of the STEPS. Respondents were asked to rate how interesting/useful the STEP was on a 4 point scale from 'not at all', to 'very'. Additional open-ended questions explored the basis for the rating and suggested improvements.

Administration

The questionnaires were administered at the end of each day, with typically 2 STEPS being evaluated

Data analysis

For each STEP, the frequency of responses to each point on the rating scale was calculated. Qualitative responses were collated for each STEP and visual analysis was undertaken of verbatim responses to the question "What (if anything) would you change to make this STEP more interesting/useful?" where the respondent had rated the STEP as either 'Not at all' or 'a Little' interesting/useful.

Facilitator's reflective diary

Development

The purpose of the diary was two-fold:

- provide a means for the facilitator to reflect on his experience of implementing the PX2 materials
- contribute to the evaluation of the project

The researchers suggested that the diary should be kept on a daily basis and include the following information:

- factual information (date, timings, venue, people present, sections covered, materials)
- significant incidents (what was considered to be the most important activities and/or event(s) of the day)
- personal interpretations (personal reflection and interpretation of daily events)

Procedure

The researchers met with the facilitator to explain the rationale for keeping a diary. The facilitator was provided with a guidance sheet, although it was explained that the final version was a matter for personal choice, and an information letter/consent form. The completed diary was shared with both researchers.

METHODOLOGY

Data analysis

Content analysis was employed. A priori categories were developed based on the findings from the student end of course evaluation questionnaire. In particular, the analysis focused on which concepts were considered most interesting/useful and suggested improvements to the programme. The first author used highlighter pens (a different colour for concepts and suggested improvements) to analyse the entire diary.

2.4.3 Strand 3 – Impact of PX2 on the Get Ready for Work (GRfW) students

Research design

To assess the impact of the PX2 programme on the GRfW students a quasi-experimental, non-equivalent group comparison, pre and post test design was used. The design is considered quasi-experimental as it involved comparing the performance of two groups, however the participants were not randomly allocated to the experimental (PX2 group) and comparison groups (Robson, 2002). As the GRfW groups were already established in the real world and only matched on this one feature, this research design compared two 'non-equivalent' groups (Robson, 2002) with one group being the comparison group. It was assumed that these groups would be comparable as entry to the programme is managed via a referral process operated by Skills Development Scotland (SDS) and that the same criteria would be applied. The measures outlined below were utilised with both groups prior to PX2 delivery (pre test) and 8 weeks later (post test) i.e. 6 weeks after completion of the programme.

To assess the longer term impact of the PX2 programme on the GRfW students, information on the destinations of the students was obtained in November 2010 (9 months following completion of the programme). This information was provided by college staff.

Participant consent

All student participants were given written information about the nature of the research. They were asked to sign a copy of the information letter/consent form and given a blank copy for personal retention.

Measures

An extensive search and evaluation was undertaken of potentially suitable measures. This involved consideration of measures employed in research studies of other PI programmes; use of search engine websites ('google/google scholar'); a targeted investigation of relevant websites (Scottish Government; Centre for Confidence and WellBeing; Authentic Happiness); and reference to the resource Measures of Children's Mental Health and Psychological Wellbeing (Frederickson & Dunsmuir, 2009). Identified measures were assessed initially for appropriateness using three criteria: measurement of one or more of the identified constructs; suitability for use with adolescents; and standardisation. These measures (20 in total) were further scrutinised for appropriateness in terms of their previous validity, reliability, age range, item number, item content, sensitivity to change using an intervention and scoring criteria. On this basis, 6 measures were selected.

a. General self efficacy scale

The general self efficacy scale is a reliable, short psychometric scale measuring optimistic self belief. It explicitly measures a person's personal agency, namely whether they hold the belief that it is the person's own actions that are responsible for successful outcomes. It has 10 items using a 4 point scale response from 'not at all true' to 'exactly true'. Scores range from 10 and 40, with the higher the score the more efficacious you are.

b. Life orientation test – revised (LOT-R)

The Life Orientation Scale is the most utilised measure of optimism. It was further revised by Scheier, Carver and Bridges (1994) to produce the LOT-R which was used in this study. The revised scale is recognised as one of the most effective measures of optimism and

is suitable for adolescents (Craig, n.d). The 10 item scale contains 3 positively worded items, 3 negatively worded items (that are reverse scored) and 4 filler items (that are not scored). Questions are answered on a 5 point scale ranging from 'strongly disagree' to 'strongly agree' with a 'neutral' response category. Scores range from 0-24, where the higher the score the more optimistic you are. This implies that it is a uni-dimensional scale, however some critics state that the measure is bi dimensional claiming that optimism and pessimism are not opposites of two poles but separate constructs (Creed et al., 2002). For the purposes of this study, the scale has been interpreted to provide levels of optimism in the students (a uni-dimensional approach), but further analyses looking at the positively and negatively worded items were undertaken to fully explore the data adopting a bi-dimensional approach.

c. Ego resiliency scale

The Ego Resiliency Scale (Block & Kremen, 1996) is a 14 item questionnaire that measures trait level resilience. This measures an individual's ability to adapt flexibly to stressful or challenging events in life (Block & Kremen, 1996; Letzring, Block, & Funder, 2005; Tugade & Fredrickson, 2004). Respondents were asked to respond on a 4 point scale from 'does not apply at all' to 'applies very strongly.' The maximum score is 56 with a higher score corresponding to a higher level of resiliency.

d. Subjective happiness scale

The Subjective Happiness Scale is a 4 item scale that provides a subjective measure of whether someone is happy or not (Lyubomirsky & Lepper, 1999). Two of the items provide an absolute measure of happiness whilst the other two items measure a person's happiness in relation to the people around them (peers). Each item employs a 7 point Likert scale where extreme points are defined. The maximum score is 7 and the closer to that figure the happier is the respondent.

e. Implicit theories of intelligence scale for children (self form)

The 3 item entity theory statements are used for this measure (Dweck, 1999). The response scale is a 6 point Likert scale from 1='strongly agree' to 6='strongly disagree'. A mean theory of intelligence score is calculated with the low end score of 1 indicating a pure entity theory and the high end score of 6 indicating an incremental theory of intelligence (Blackwell, Trzesniewski, & Dweck, 2007).

f. Locus of control for children scale

This is a 40 item questionnaire that is designed to identify the type of control beliefs (external or internal) held by children and young people and the strength of these beliefs (Nowicki & Strickland cited in, Dunsmuir and Frederickson, 2009). The scale has been standardised for the 9 years to 18 years age range. Respondents answer yes or no to questions such as 'are some people just born lucky?' and 'do you feel that when someone doesn't like you there is little you can do about it?' Higher scores correspond to higher levels of an externalised locus of control.

Interviews

Interviews, conducted pre and post, were employed in a complementary fashion to address research questions not covered by the standardised measures. Questions focused on the participants' occupational aspirations, expectations and goal setting.

a. Occupational aspirations and expectations

To assess the participants' occupational aspirations and expectations, the interview employed two questions used previously with adolescents (Beal & Crockett, 2010). Participants were asked 'what type of work would you like to do when you are older if nothing was to stand in your way?' (occupational aspiration) and 'what type of work do you think you will probably end up doing?' (occupational expectation).

b. Goal setting

In order to assess the students' present goals, they were asked to supply three immediate goals they had set themselves in their life and then asked to rate how likely they felt they were to achieve them out of 10 (where 10 is definitely yes). Further exploratory questions were 'how are you going to achieve these goals?' and 'what will you now do to progress these goals today?'

c. Post Pathways to Extreme success (PX2)

The PX2 group were asked 5 additional questions to ascertain the impact of the PX2 programme 6 weeks after delivery. These questions explored whether the participants felt anything had changed for them since completing the PX2 programme; had they noticed themselves doing anything

differently; were they using any of the PX2 strategies; any subjective changes in the way they were approaching finding employment; and what was the most important thing they remembered about PX2.

Administration

The students in both groups met with the second author for around 30-40 minutes. Informed consent was gained. Data pertaining to the gender, age and number of weeks on the GRfW course were recorded; a participant number applied; then the six measures and the interview questions were administered. Questions were read aloud and the responses recorded by the researcher. Certain words and phrases were clarified for the students as required. Responses to the interview questions were recorded verbatim. This was achieved as the answers were not usually more than a short sentence.

Data analysis

Questionnaires

Participants' scores were calculated for all the standardised measures. Mean scores for both groups on each measure were then compared. Due to the small number of participants, individual scores were compared pre and post to assess change over the eight week period.

Interviews

Occupational aspirations and expectations

Students' occupational aspirations and expectations were compared between the two groups at pre and post test and also over the eight week period.

Goal setting

Comparisons were made between the two student groups with regard to the frequency of each type of goal, the attainment strategies, and rating scores for the likelihood of success in each goal. Mean rating scores were calculated for each student and each group enabling a comparison across the two groups.

Post Pathways to Extreme success (PX2)

Interview data were subject to thematic analysis using Braun and Clarke's (2006) 6 phase method. The process was similar to that undertaken in the analysis of the Strand 2 facilitated group discussion.

RESULTS

3.1 Training the Trainers

3.1.1 Investment in Excellence (IIE) training

The IIE questionnaire was used to investigate participants' perspectives on a number of aspects of the IIE training. For the purposes of this report, the findings will focus on answering the question "What is the perceived impact of IIE training on the participants' professional development and personal growth?" Questions for analysis were selected on that basis.

Question 6 asked the participants to rate how positive their outlook was before and after the training. The findings are displayed in Figure 4. There is a clear improvement in the respondents' outlook, which is more positive after the training. It should be noted that 2 respondents only provide an after response.

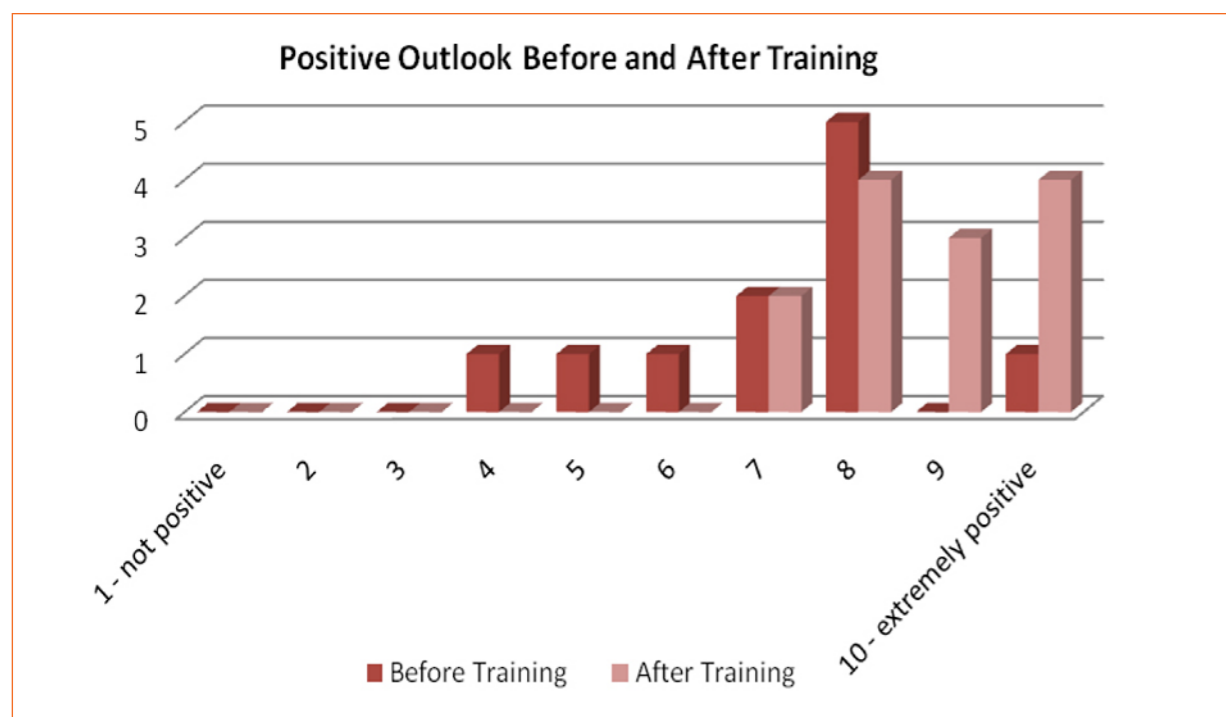


Figure 4 Positive outlook before and after IIE training

Question 8 asked whether completing the IIE training had led to new personal insights using a YES/NO response. Ten of the 13 respondents replied in the affirmative. Question 9 (open-ended) explored the basis for responding YES.

As outlined in section 2.3.1 and Table 4, a coding scheme for the open ended questions was developed. For the purposes of these results, the coding frequency applied by the first author is presented with the overall agreement between the two coders to allow interpretation.

With regards to 'what do you feel you have learned about yourself whilst going through IIE training?', two categories were highlighted by the training participants: awareness of personal qualities/personal growth/outlook (N=5); using strategies in life now (N=12). The agreement between the two coders for this question is 87.5%.

In relation to the question 'Have you noticed yourself doing anything differently since you completed the IIE training?' three categories were highlighted by the participants: more reflection on events (N=11); outlook on life more positive (N=2); actions/behaviour change (N=9). The agreement between the two coders for this question is 77%.

Question 12 asked the respondents 'Has involvement in the IIE training had an impact on how you think about your working situation?' For those responding YES (majority) and who were invited to expand on their response, 6 categories emerged: tolerant of others (colleagues) (N=2); IIE strategies to aid development (N=5); working with students (goal setting) (N=1); increased awareness of things within the workplace (N= 5); feeling more supported (N=1); and increased self-belief (N=1). The agreement between the two coders for this question is 97%.

Finally, Question 13 asked 'Have you noticed yourself applying ideas from the IIE training in your everyday life?' Respondents were asked to consider this in 2 contexts: at work and at home. In relation to the former, five categories emerged from the analysis: specific strategies/activities (N=9); challenging students/young people's beliefs (N= 1); challenging other colleagues (N=1); more confidence in positive outcome (N=1); and an unspecific positive response (N=1). The agreement between the two coders for this question is 100%. With regard to application at home, there were 3 categories: family relationships (N=5); using specific strategies/activities (N=8); and positive effect/viewpoint (N=2). The agreement between the two coders for this question is 94%.

3.1.2 Pathways to Extreme Success (PX2) training

The questionnaire, administered following completion of the training, was used to investigate the participants' perspectives on a number of aspects of the PX2 training. For the purposes of this report, the findings will focus on answering the research questions: 'What is the perceived applicability of the PX2 programme to the participants' client group?'; 'What are the projected benefits of the PX2 programme for the students?' and 'How confident are the trained facilitators in delivering the PX2 programme?' Questions for analysis were selected on that basis.

Relevance to young people

Considering the first research question, question 10 asked 'To what extent do you think that the PX2 programme will be relevant to the young people you work with?' A 10 point scale from 1=not relevant to 10= extremely relevant was used. Of the 10 respondents to this question, 7 rated it as extremely relevant (point 10 on the scale) and 3 rated it at 8.

Projected benefits

In terms of 'projected benefits', question 16 asked 'What changes do you expect to take place in young people as a result of the PX2 programme?'. This was explored through a series of open-ended questions exploring attitude to life and/or work; self-esteem; future aspirations; motivation for life and/or work; self-efficacy; behaviour and conduct; goal setting ability; better understanding of themselves; and ability to reflect on own thoughts and behaviour.

Attitude to life and/or work

Two categories were highlighted by the respondents: understanding about themselves (N=2); impact on behaviour through a changed attitude to life and work (N=9). The agreement between the two coders for this question is 72%.

Self-esteem

Three categories were highlighted by the respondents: increased self-esteem/address issues (N=6); development of skills and strategies (N=1); and greater self-awareness (N=4). The agreement between the two coders for this question is 100%.

Future aspirations

Four categories were highlighted by the respondents: more positive outlook to future (N=2); awareness of potential growth (N=3); broadening horizons – career rather than a job; beyond current outlook (N=4) and skill development (N=1). The agreement between the two coders for this question is 91.5%.

Motivation for life and/or work

Two categories were highlighted by the respondents: self-awareness (N=3); and impact and outcomes (observable) (N=7). The agreement between the two coders for this question is 54%.

RESULTS

Self-efficacy

Three categories were highlighted by the respondents: self-awareness (N=4); impact and outcomes (observable) (N=4); and unsure (N=2). The agreement between the two coders for this question is 85%.

Behaviour and conduct

Two categories were highlighted by the respondents: self-awareness (meta-cognitive level) (N=5); and impact and outcomes (observable) (N=7). The agreement between the two coders for this question is 84%.

Goal setting ability

Two categories were highlighted by the respondents: skills in goal setting-ability to apply (N=9); and self-awareness (N=3). The agreement between the two coders for this question is 100%.

Better understanding of themselves

Two categories were highlighted by the respondents: better understanding of themselves-the way your mind works (N=10); and behavioural change (N=1). The agreement between the two coders for this question is 52.5%.

Ability to reflect on own thoughts and behaviour.

Three categories were highlighted by the respondents: self-awareness-thinking (N=1); reflection-skill (N=6); and observable change in behaviour (N=3). The agreement between the two coders for this question is 94.3%.

Confidence in delivering programme

In relation to levels of confidence in delivering the programme, question 6 (multiple choice) asked 'How ready do you feel to facilitate following the PX2 training course?' The responses to this question are illustrated in Figure 6. It should be noted that some respondents ticked more than one box. The highest frequency (N=7) was for 'ready to go solo'. The other responses (N=6) indicated a desire for further support whether in terms of co-working or further preparation.

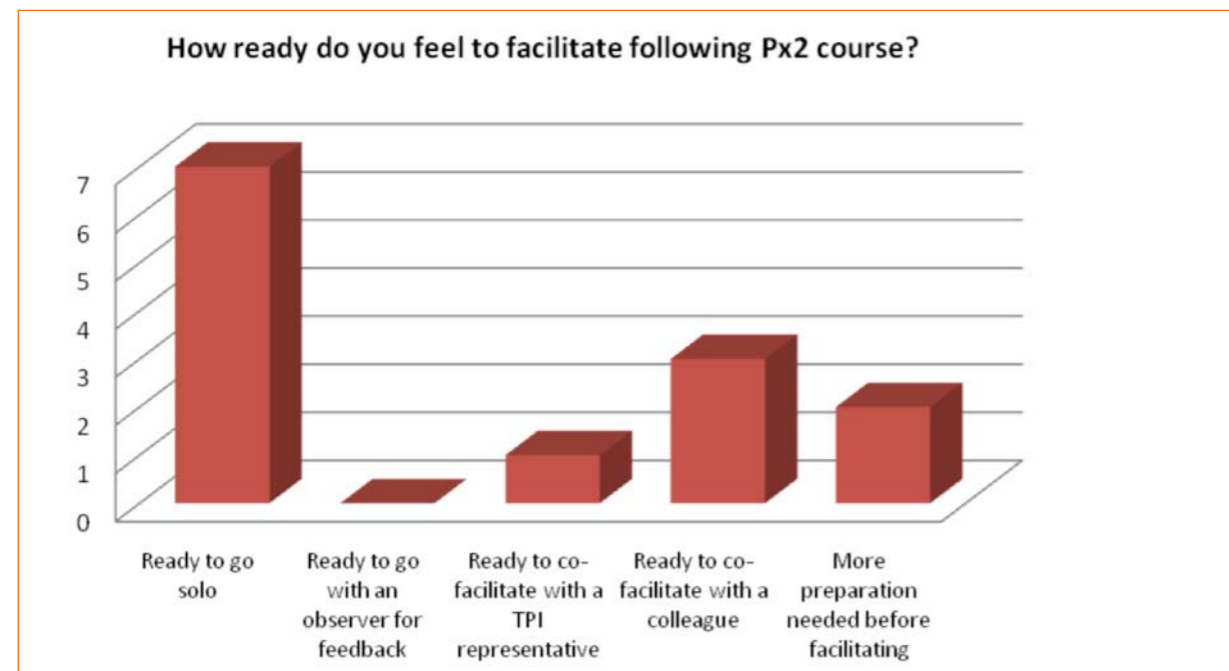


Figure 6 How ready do you feel to facilitate following the PX2 course?

Question 14 asked the respondents to 'rate how confident you feel about using PX2 in your work with young people using the scale 1-10' (where 1 = not confident; 10 = confident). Responses were in the range 7-10.

3.2 Evaluation of PX2 materials

3.2.1 Evaluation questionnaire following completion of the PX2 programme

In response to the question 'how interesting/useful have you found the PX2 programme?' the majority of participants rated it very positively with nine rating it 'quite useful' and three rating it 'very useful.' These results are displayed in Figure 7.

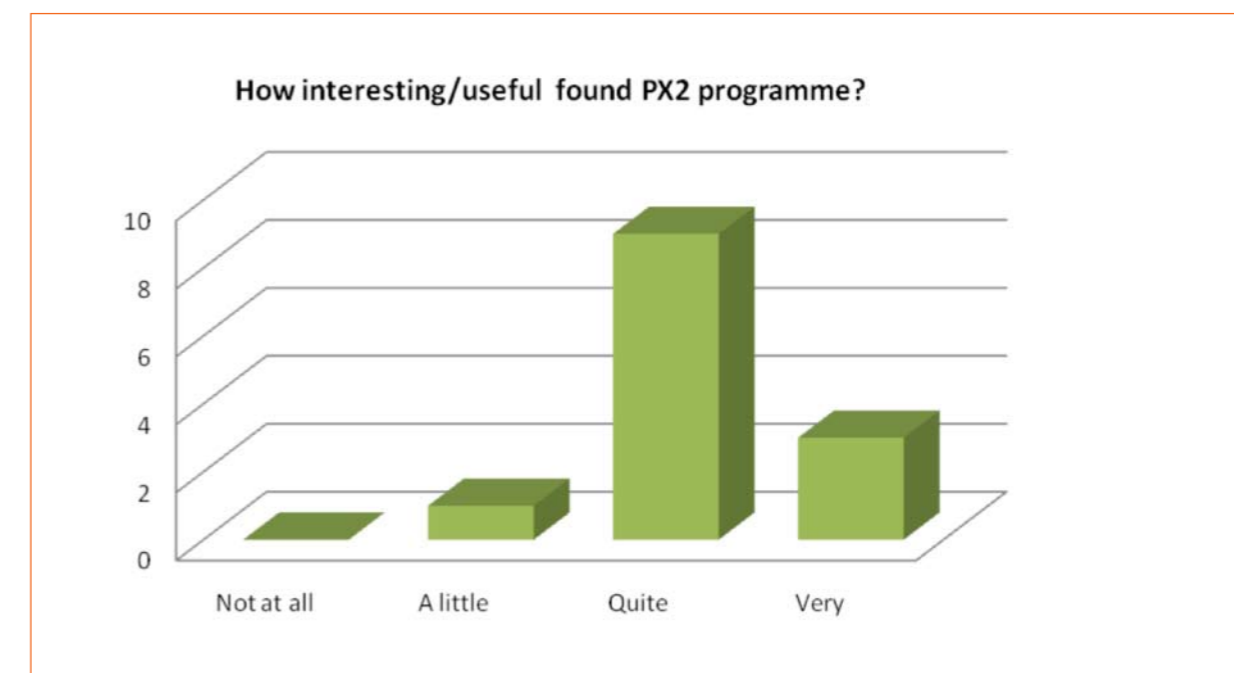


Figure 7 How interesting/useful the students found the PX2 programme

As outlined in section 2.3.1 and Table 4, a coding scheme for the open ended questions was developed. For the purposes of these results, the coding frequency applied by the second author is presented with the overall agreement between the two coders to allow interpretation.

With regards to 'what concepts did you find most interesting and useful to you?', ten areas were highlighted by the students: how to control your mind (N=4); how my mind works (N=3); stretching my comfort zones (N=1); lock on lock out (N=4); who do I listen to (N=1); ready to create my future (N=1); SCOTOMA (N=4); blind spot (N=1); thinking outside the box (N=1); and the subconscious conscious concept (N=1). It should be noted that all of these reported concepts refer to STEPS within the programme or themes running throughout the PX2 programme. The agreement between the two coders for this question is 86%.

Students were asked 'what areas of your life do you intend to use these concepts?' Students responded by reporting eight possible areas of their life where they felt that they would be likely to use the concepts. These are presented in order of frequency: in other areas of their life or all of the time (N=4); in finding employment (N=3); at work (N=2); to think more positively (N=1); in college (N=1); for future challenges in their life (N=1); recreationally (N=1); and none or no areas (N=1). The agreement between the two coders for this question is 100%.

RESULTS

In addition to the above, the students were asked in what ways they thought the application of concepts might help. Students responded with a variety of areas: finding them a job or work (N=4); thinking more positively about things (N=4); assisting them to focus their attention more (N=3); increasing their motivation (N=2); increasing their confidence (N=1) and self esteem (N=1); improving their social lives and relationships (N=1); and making their subconscious become conscious (N=1). The agreement between the two coders for responses to this question is 88%.

Students were asked to state what their immediate goals were. Across the students, six different types of goal emerged: to get a job or to develop their career was the most frequently stated (N=12); developing a greater self belief and raising their expectations of themselves (N=5); to improve their punctuality and or attendance (N=4); to learn to drive (N=2); to socialize more (N=1); and to change their appearance (N=1). Agreement between the two coders for this question was 100%.

To further explore these goals the students were asked what they would do now to progress these goals. Three different types of strategy emerged from the data: to use specific strategies to undertake practical steps or activities in relation to goal achievement (N=12); to work hard and apply themselves more (N=5); and by applying the PX2 strategies to help them achieve their goals (N=1). Agreement between the two coders for this question was 100%.

In terms of improvement suggestions students were asked 'what could your facilitators do to make the programme more interesting/useful to you?' The student responses provided six themes for improvement: to have less DVD's (N=6); more practical activities to be involved (N=3); to make the atmosphere better (N=3); for nothing to change (N=3); for the PX2 programme to use more accessible language in the packs (N=2); and to have more group discussions (N=1). The agreement between the two coders for this question was 94%.

The students were asked whether they would recommend the PX2 programme to a friend. Eleven out of the 14 students rated this positively ticking either 'likely' (N=5) or 'definitely' (N=6). These results are displayed graphically in Figure 8.

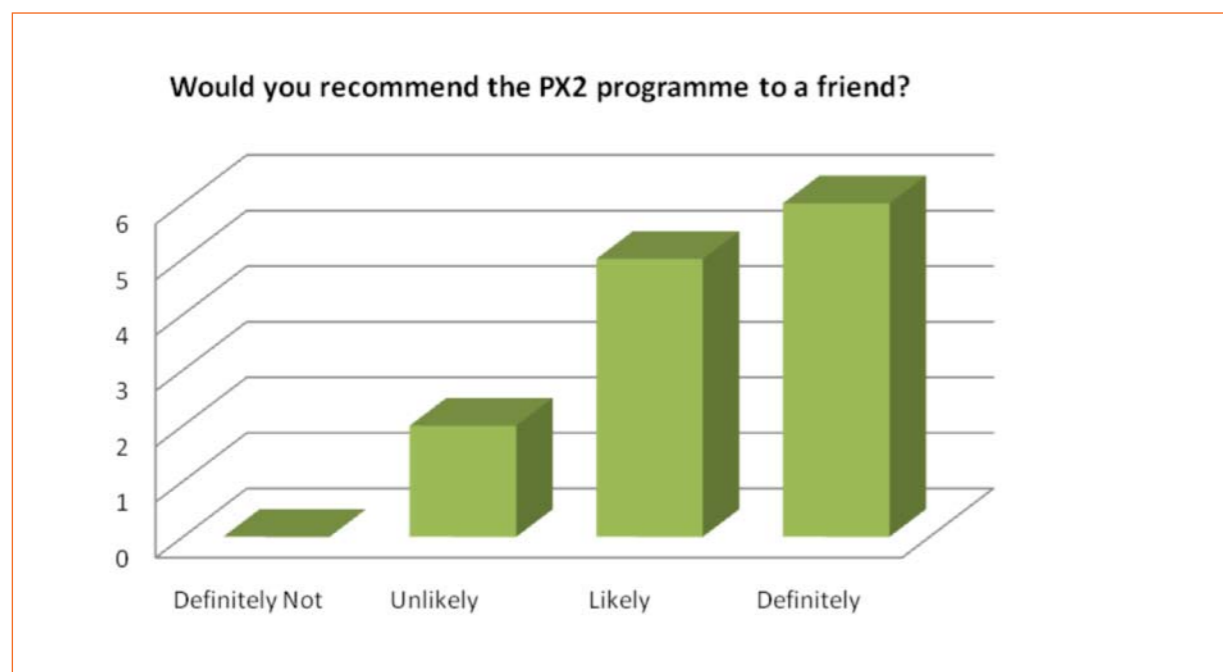


Figure 8 Student's recommendation of PX2 to a friend

What went well? /What did the students like about PX2? Three main themes emerged from the facilitated group discussion namely: course delivery; course content; and impact on the students. The students felt that the course delivery was something that worked well as it encouraged team work and engagement of all students, the course pace and length was felt to be long enough and the facilitator provided good motivation. The students also felt that aspects of the course content worked well and they liked aspects of the DVDs and the booklets. Students also discussed the impact that they felt the PX2 programme had on them including increasing their planning skills; changing their thinking style to be more positive; and increasing their self-efficacy and self esteem.

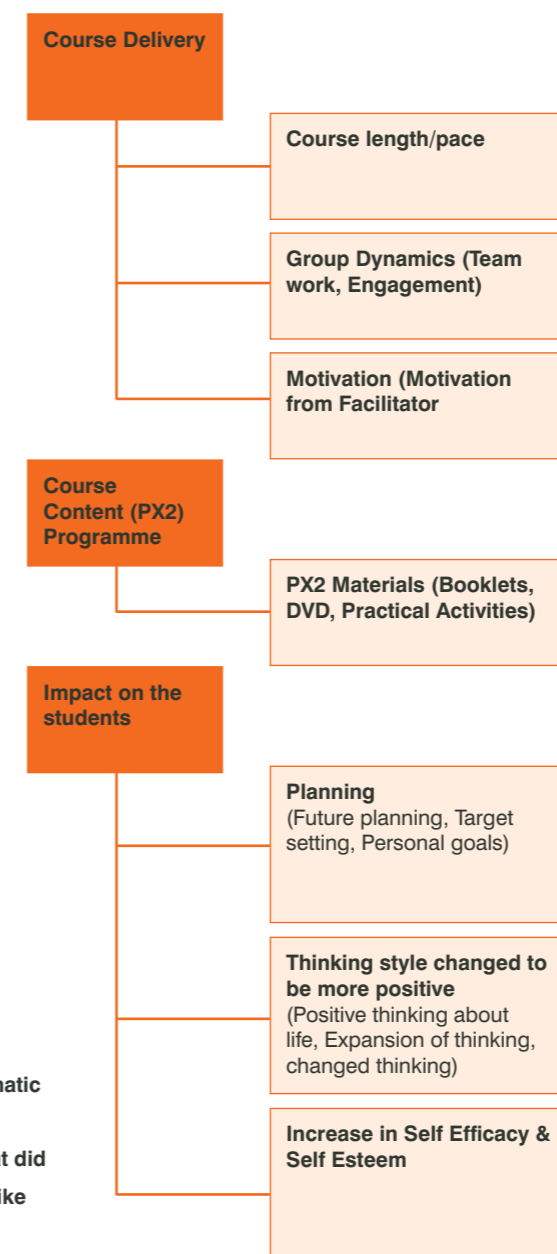


Figure 6 Thematic map 1 – What went well/what did the students like about PX2

Improvement suggestions for PX2 programme
One main theme emerged in the facilitated discussion in terms of the course content (see Figure 7). The students directed all improvement suggestions towards adaptations to the PX2 programme materials. Students felt that improvements were required to the PX2 materials; in particular the DVD should contain less talking, is a bit distracting, should contain more diagrams and illustrative content and is very American. In terms of the PX2 booklet materials, students felt that these could be improved by having more blank pages to write in and more activities. Another sub-theme which emerged was that students felt that some areas of the PX2 programme were difficult to understand: specifically they felt some of language used was too difficult (use of large words); some of the diagrams and models were too complex to understand; and that the language was very American.

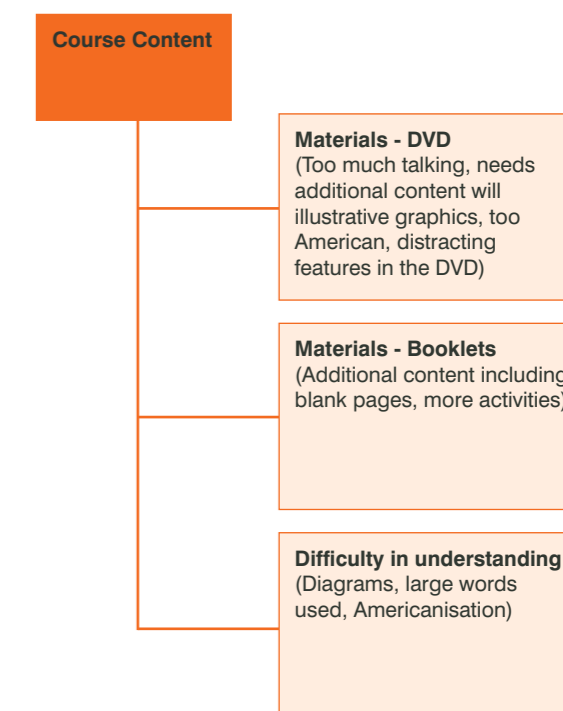


Figure 7 Thematic Map 2 - Improvement suggestions for the PX2 programme

RESULTS

What is different about PX2 when compared to the usual GRfW Programme?

In terms of what was different about the PX2 programme compared to GRfW, three main themes emerged from the discussion: benefits and positive change; team work; and less of a job finding focus (see Figure 8). In relation to the theme 'benefits/positive change', one of the sub-themes was that it was felt that time passed more quickly and the second sub-theme was that it was a very positive experience for them. Related to the second main theme, it was felt that there was more team work within the group, incorporating more discussion and involvement of everyone. Finally, it was thought that there was less of a job finding focus during the PX2 programme as no one was out on placement and there was less searching for jobs.

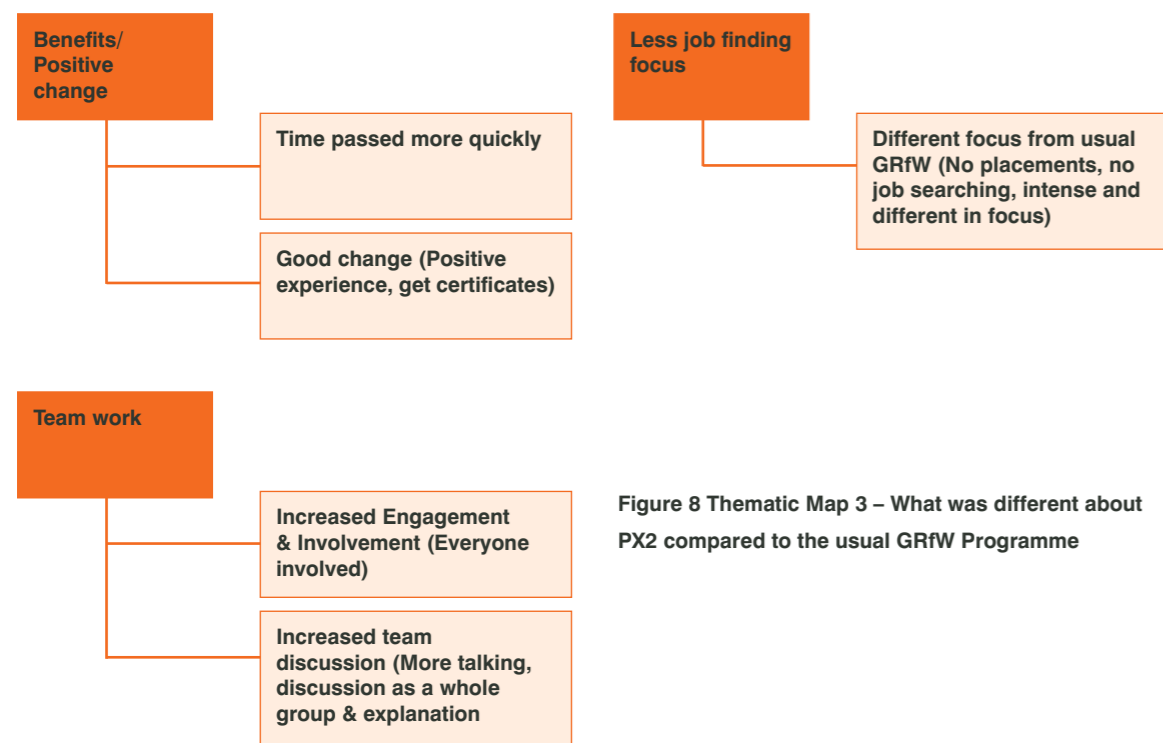


Figure 8 Thematic Map 3 – What was different about PX2 compared to the usual GRfW Programme

3.2.3 Evaluation questionnaire at the end of each individual STEP (12 STEPS) of the programme

Overall, the majority of respondents rated the 12 STEPS as either quite or very interesting/useful (see Table 5)

Table 5 How interesting/useful did you find this STEP in the programme?

STEP	Not at all	A little	Quite	Very	No Rating
1		1	8	3	1
2			4	5	2
3		1	4	5	2
4			2	9	2
5	2	1	5	2	1
6		3	4	2	1
7			5	6	2
8		1	5	5	2
9	2		4	5	1
10		1	7	2	1
11		1	6	2	1
12			5	4	1

Where a respondent rated a STEP as either Not at all or A little, further analysis was undertaken with regard to responses (where provided) to the question: What (if anything) would you change to make this STEP more interesting/useful? Given the small frequency of responses in these 2 categories, all verbatim responses are reported below.

"Not as big words and speak faster"

"Describe it better and use smaller words"

"An activity instead of listening to someone talk for a long time"

"Less talking"

"It was quite boring so they could make it more interesting"

"Less big words/hard to understand"

"Use smaller words"

It should be noted that in one instance, although the respondent had rated the STEP a Little, the response to the question was *"nothing it was rather interesting"*.

The 2 main themes which emerge from analysis of the verbatim responses are the *complexity of language and overuse of talking*.



RESULTS

3.2.4 Facilitator's reflective diary

The facilitator reported that a wide range of concepts were viewed as being interesting/useful to the students. These were: scotomas; conditioning; lock-on/lock-out; sub-conscious; creative sub-conscious; reticular activating system; personal responsibility; taking control of their own future; perception; cognitive dissonance; emotional history; self-image; how my beliefs are formed; self-talk; self-esteem ; self-worth; comfort zone; goal setting; affirmations; push/push back; and visualisation. Suggested improvement to the programme, based on the facilitator's experience of delivering the programme and the students' responses, were: less American; less/edited DVD; cover less of the programme in one day; repeat the programme with a break of a few weeks; the age of one of presenters in DVD; and use a different venue from normal GRfW programme.

Strand 3 Results – Impact of PX2 on the Get Ready for Work students

Measures

General self efficacy scale

The internal consistencies for the General Self Efficacy Scale were all above $\alpha=0.7$ showing good internal consistency within this sample for this scale (Coolican, 2004: p189). The descriptive statistics for the 2 groups, pre and post, are outlined in Table 6. The C group scores increase across the 8 weeks whilst the PX2 groups scores decrease slightly. The 2 groups are achieving similar post test scores (PX2 = 30.56 and C= 30.67) although the PX2 group has a larger range of scores.

On closer inspection of the results at the individual level, only 4 out of 9 in the PX2 group increase their scores but all 6 of the C group increase. The C group, in terms of their self efficacy scores, make a larger gain in self reported self efficacy after 8 weeks.

Table 6 Descriptive Statistics Comparing the Two Groups on the General Self Efficacy Scale

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	31.11 SD4.09	12 (27-39)	30.56 SD4.21	15 (21-36)	-0.55
Comparison Group	26.5 SD3.39	10 (23-33)	30.67 SD1.21	3 (29-32)	+4.17

Where numbers in **highlight** positive change

Where numbers in **highlight** negative change

Life orientation test revised (LOT-R)

For the 6 scored items in this scale, the internal consistency within this sample was $\alpha = 0.79$ overall. Descriptive statistics for the 2 groups, pre and post, are outlined in Table 7. Both groups made gains on this measure over the 8 weeks. The PX2 group makes a larger gain in scores over the 8 weeks than the comparison group (difference PX2= 1.45, C= 0.83). However, the C group scored higher than the PX2 group at pre and post test showing that this group were more optimistic at the outset. On an individual basis, each group's upper score limit was the same at 19 out of a possible 24.

Table 7 Descriptive Statistics Comparing the Two Groups on the LOT-R

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	11.33 SD2.96	9 (6-15)	12.78 SD5.16	18 (1-19)	1.45
Comparison Group	12.67 SD4.17	11 (5-16)	13.5 SD3.15	9 (10-19)	0.83

Where numbers in **highlight** positive change

Where numbers in **highlight** negative change

This scale was also explored in terms of the two factor model splitting optimism and pessimism scores as outlined by Creed et al. (2002) and Scheier et al. (1994). For these two 3 item subscales, reliabilities were very high (optimism $\alpha = 0.74$; pessimism $\alpha = 0.82$), higher than previously reported in these other studies.

The descriptive results for the two groups over the 8 weeks are detailed in Tables 8 and 9. The PX2 group increase in their levels of optimism and also slightly increase their levels of pessimism, whereas the C group decrease in their levels of optimism and increase in their levels of pessimism. Analysing the results in this manner shows that the PX2 group are more optimistic at post test and less pessimistic than the C group, therefore contradicting the findings above using the LOT-R as a uni-dimensional scale. For the purposes of this study, it appears that the use of the LOT-R as a bi-dimensional scale is more sensitive to the changes between the groups in levels of optimism and pessimism.

Table 8 Descriptive Statistics Comparing the Two Groups on the LOT-R – Optimism scores

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	6.78 SD2.05	7 (2-9)	7.33 SD2.96	10 (1-11)	+0.55
Comparison Group	7 SD2.00	6 (4-10)	6.83 SD1.83	5 (5-10)	-0.17

Where numbers in **highlight** positive change

Where numbers in **highlight** negative change

RESULTS

Table 9 Descriptive Statistics Comparing the Two Groups on the LOT-R – Pessimism scores

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	4.56 SD1.81	6 (2-8)	5.44 SD3.28	9 (0-9)	+0.88
Comparison Group	5.67 SD2.73	7 (1-8)	6.67 SD1.36	4 (5-9)	+1.00

Where numbers in **highlight** negative change

Ego-resiliency scale

For the 14 items in this scale, the internal consistency within this sample was $\alpha = 0.74$ overall. The descriptive statistics for the 2 groups, pre and post, are outlined in Table 10. Over the 8 week period, the PX2 group actually decrease in resilience scores (difference = -2.89) whereas the C group increase (difference = +2.83). Within the PX2 group, the range of scores is very wide, with one member of the PX2 group scoring the highest resiliency trait out of all the students.

Table 10 Descriptive Statistics Comparing the Two Groups on the Ego-resiliency Scale

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	38.78 SD6.7	17 (29-46)	35.89 SD6.8	22 (24-46)	-2.89
Comparison Group	36.5 SD5.35	14 (28-42)	39.33 SD3.83	10 (33-43)	+2.83

Where numbers in **highlight** positive change

Where numbers in **highlight** negative change

The scores obtained for this measure can also be categorised from very low to very high resiliency trait. If the scores are viewed within these brackets, 7 students in the PX2 group obtained a level of 'high resiliency trait' and 2 students 'undetermined resiliency trait', and these remain unchanged across the eight weeks. For the C group, at pre test 4 students obtained a level of 'high resiliency trait' and two 'undetermined resiliency trait'. At post test one person made the shift from undetermined to high.

These results indicate that the C group make more gains in resilience than the PX2 group across the eight weeks although the levels of resiliency trait (from very low to very high) for almost all students appear to remain unchanged for both groups.

Subjective happiness scale

For the 4 items in this scale, the internal consistency within this sample was $\alpha = 0.80$ overall. The descriptive statistics for the two groups, pre and post, are outlined in Table 11. The two groups across the 8 weeks make small gains in their happiness scores, with the C group having a higher mean score of happiness at post test. Looking at the individual scores of the students, 7 out of the 9 students in the PX2 group make gains in their happiness scores across the 8 weeks, with 4 out of the 6 in the C group making gains.

Table 11 Descriptive Statistics Comparing the Two Groups on the Subjective Happiness Scale

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	4.78 SD1.27	4.25 (2.25-6.5)	5.17 SD1.13	3.75 (2.50-6.25)	+0.39
Comparison Group	4.5 SD 1.08	2.75 (3.25-6)	5.25 SD0.41	1 (4.75-5.75)	+0.75

Where numbers in **highlight** positive change

Implicit theories of intelligence scale for children (self form)

For this 3 item scale, the internal consistency within this sample was $\alpha = 0.78$ overall. The descriptive statistics for the two groups, pre and post, are outlined in Table 12. Both groups decrease in their scores over the 8 weeks. At both time points, the PX2 group are closer to an agreement with an incremental theory of intelligence.

Table 12 Descriptive Statistics Comparing the Two Groups on the Implicit theories of intelligence scale for children (self form)

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	4.59 SD0.88	2.67 (2.67-5.33)	4.26 SD 1.49	4 (2-6)	-0.33
Comparison Group	3.87 SD 0.69	1.67 (3.33-5)	3.78 SD1.19	3.33 (1.67-5)	-0.09

Where numbers in **highlight** negative change

RESULTS

Locus of control scale for children (LOCC)

For this 40 item questionnaire, the internal consistency within this sample was $\alpha = 0.65$ overall. The descriptive statistics for the two groups, pre and post, are outlined in Table 13. Both groups reduce their scores across the 8 weeks indicating that the groups' perception of their locus of control is becoming more internalised. The C group decrease their scores by more across the 8 weeks with a reduction of 6.5 compared to the PX2 group with a reduction of 0.55. In terms of the scores obtained for this sample, they are all below expected norms for a 15 and 17 year old sample (Frederickson & Dunsmuir, 2009) where scores for these samples were: males = 13.81 (SD 4.06); females = 12.25 (SD3.75); males = 12.48 (SD4.81); and females = 12.01 (SD5.15) respectively. It should be noted that at pre test the PX2 group had a more internalised locus of control than the C group. At an individual level, 3 students in the PX2 group had lower locus of control scores and 2 stayed the same, whereas 5 students in the C group had lower scores and 1 stayed the same.

Table 13 Descriptive Statistics Comparing the Two Groups on the LOCC

Group	Pre Test	Range	Post Test	Range	Difference
PX2 Group	12.33 SD3.46	11 (5-16)	11.78 SD4.05	10 (6-16)	-0.55
Comparison Group	15.67 SD5.99	13 (7-20)	9.17 SD3.25	10 (4-14)	-6.5

Where numbers in **highlight** positive change

Interview Data

Occupational aspirations and expectations

In terms of student's occupational aspirations, this is the form of occupation that they aspire or would like to do eventually in the future. In terms of aspirations, in the PX2 group the students stated that they aspired to undertake specific occupations or careers e.g. owning their own business (construction/hospitality), working with a trade or joining the police force or army. At post test, 8 out of the 9 participants stated the same type of aspiration at pre and post test, showing no change. In the C group the students stated that they aspired to undertake similar career orientated options e.g. care sector, police, computing IT, child psychologist. However, at post test only 4 out of the 6 stated the same type of career aspiration.

In terms of occupational expectations, this is what the students think they will end up doing taking into account the current environmental factors of the recession, availability of jobs, skills and other role models in the community. For some students these differed from their aspirations. For the PX2 group, 6 students' expectations were matched between pre and post test. For the C group 2 students' expectations matched across the 8 weeks. Due to the type of course, as the students are all thinking about employment opportunities, it is possible that their personal research may change what they think they might end up doing due to the knowledge they gather. At post test, the students' expectations and aspirations were compared. For the PX2 group, 5 out of 9 students provided the same response for their occupational aspirations and expectations. For the C group, 4 out of 6 students responded similarly with their occupational aspirations and expectations. Subjecting the students' aspirations and expectations to more in depth analysis at post test reveals that although a high number of the students in both groups match their expectations and aspirations at post test, in the PX2 group the students actually appear to revise their expectation (from pre test) to be more in accordance with their aspiration, whilst the C group revise their aspiration to become more in line with their expectations. For example, one PX2 student stated that her aspiration at both stages was to own her own hotel but at pre test she stated that her expectation was that she would end up 'working in an office or something like that'. At

post test, her expectation was changed and now matched her aspiration 'own my own hotel.' This implies that she now felt that she could aspire and achieve her occupational aspiration which had now become her expectation of herself in the future. Within the C group another example is a female student who at pre test stated her aspiration and expectation was to be a teacher. However, at post test she had revised this to both be hairdresser/beautician due to application for current college courses, so in some respects she could be viewed as lowering her aspirations in line with her expectations as she was about to start a course in this area.

Goal setting

The students in both groups were asked to provide three immediate goals they had set themselves in their lives and the likelihood out of 10 of their achievement of these goals. In terms of the types of goals that the students were providing, there was a lot of similarity across the two groups with goals that could be considered very specific to a 16 and 17 year old population in terms of a focus of passing their driving test and getting a job. A summary of the type of goals (key themes emerging) provided by each group with their frequency is displayed in Table 14.

Table 14 Types of goals provided by the two groups with frequency

PX2 Group	Pre	Post	C Group	Pre	Post
Get a job	8	6	Get a job	3	3
Driving lessons/license/ Pass driving test /get a car	5	7	Driving lessons/license/ Pass driving test /get a car	5	2
Get a house	2	1	Go on college course	3	5
Earn good money/wages/ rely on myself financially	3	1	To be more confident	2	1
Work placement	1	2			
Go on college course	2	0			
Join the forces/army	0	3			
Own my own business	1	1			

As shown above, the two groups have similar goals to each other, between pre and post test. In terms of the strategies the students plan to use to attain these goals, themes emerge from the data for both groups. These are 'practical strategies or steps to be taken to reach goal attainment' e.g. completing application form; save money; take driving lessons and 'personal goal pursuit by applying oneself' e.g. working harder; listening more to instructions; stick in and do everything asked of me; be reliable; and do the best I can. Table 15 outlines the frequency of these themes for each group in terms of goal attainment strategy. It should be noted that in response to some of the goals stated by the students a practical step was required to attain these goals (e.g. take driving lessons in response to the first step to passing their driving test).

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Table 15 Types of goal attainment strategies provided by the two groups

Types of strategy	PX2 Pre	PX2 Post	Comparison Group Pre	Comparison Group Post
Practical steps	11	13	12	15
Personal goal pursuit by applying oneself	11	11	4	2

In terms of the 3 goals, the students were subsequently asked to rate how likely they thought they would be in attaining these goals where 10 is 'definitely yes.' A mean score was calculated for each student's ratings (across the 3 goals) and then a group mean was calculated. Table 16 outlines each group's ratings at pre and post test.

Table 16 Mean ratings of scores for expected goal achievement

Mean	Pre Test	Range	Post Test	Range	Difference
PX2 Group	7.83 SD1.02	3.67 (6.33-10)	9.08 SD0.79	2.33 (7.67-10)	+1.25
Comparison Group	7.26 SD1.04	2.33 (6.33-8.67)	8.44 SD1.22	3 (6.33-9.33)	+1.18

Where numbers in **highlight** positive change

The results from both groups show an increase over the 8 week period in terms of their perceived likelihood of success. Both groups increase towards 10. Looking more closely at the individual scores, 16 of the 27 PX2 students' goal ratings (59%) increase across the group with 12 goals (44%) rated as 10 out of 10 in terms of expected success at post test. In the C group, 11 out of 18 students' goals increase their ratings (61%) but only 6 (33%) provide a 10 out of 10 response.

Performance across the measures by individuals in PX2 group

Due to the small numbers of participants in this study, a more beneficial comparison of the descriptive data would be at the individual level of the student in the PX2 group between pre and post test to assess gains for individuals across the measures. Table 17 compares the data for all 9 pre and post matched PX2 participants across the 8 measures.

Table 17 Individual comparison of positive scores gained across the measures between pre and post test for PX2 group

Px2	Self Efficacy Scale	LOT-R	Ego Resil Scale	Happiness	LOCC	Dweck Scale Implicit theory of intel for children	Goals	Aspirn expectn match at post test	Total areas (out of 8)
1(M)				↑		↑	= (10s)	Yes	3
2(M)	↑			↑			↑	-	3
3(M)	↑	↑		↑	↑		↑ (10s)	Yes	6
4(F)	↑		↑	↑			↑	-	4
5(M)				↑			↑ (10s)	Yes	3
6(M)		↑		-		=		Yes	2
7(M)		↑		-			↑	-	2
8(F)		↑		↑	↑		↑	Yes	5
9(F)	↑	↑		↑	↑	=	↑	Yes	6

F= female M=Male

As detailed in Table 17, all 9 students made gains in 2 or more areas over the 8 week period. The 3 females and 1 male in the group make the most gains with 4 or more areas making gains in scores across the 8 weeks. It appears from investigating the results in this manner that for those for whom PX2 has had an effect, it has had a strong effect across the range of measures.

Post PX2 delivery interview

Six of the 9 students felt that by doing the PX2 programme four key areas had changed for them (see Figure 9). Students felt that their thinking style has changed stating that they feel they were thinking differently, more positively and more deeply about things. E.g. 'thinking about things in a more positive way,' 'think about things more before I do them' 'made me think more in depth about things.' Students felt that there were changes in the way they took other people's perspectives and see things from a different point of view in terms of 'seeing things in the bigger picture' and 'seeing things from another person's point of view.' Students also stated that there were changes to their behaviour in terms of both visible behaviours (talking more and doing more things) and internal changes (attitude change and more confidence) e.g. 'I work harder, I talk more and i've got more confidence.' Increased motivation was also a key theme that emerged from this data in that students felt they were working harder and had more motivation to undertake work related tasks. E.g. 'more get up and go,' 'got a boost.'

RESULTS

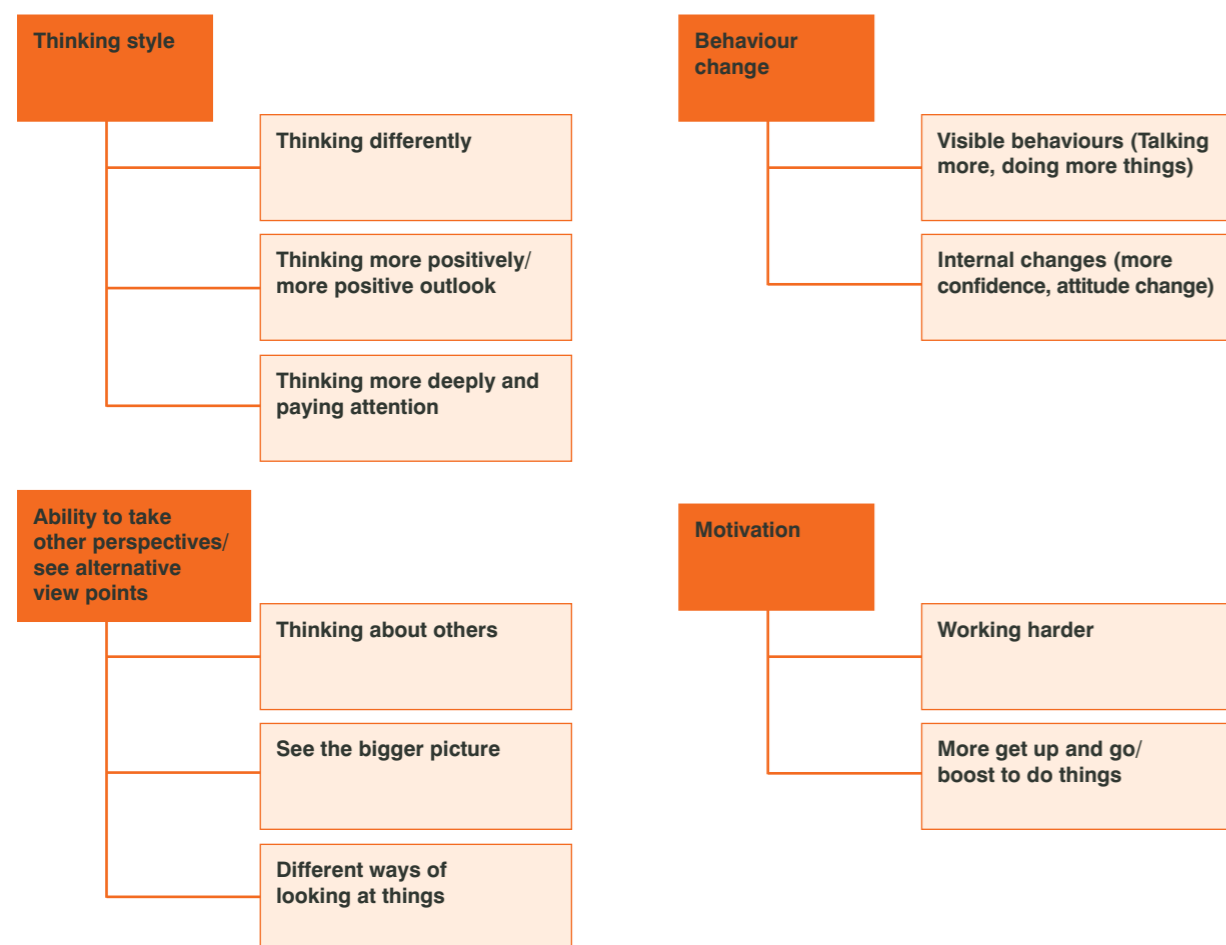


Figure 9 Thematic Map – What students think has changed for them since doing PX2

In terms of noticing anything different about themselves, 6 students stated 2 areas where they had noticed differences in themselves (see Figure 10). Students reported internalised changes in terms of their thinking style, changes in their attitudes towards work and also a noticeable increase in their motivation and confidence. E.g. *'I think of more things to do, taking the initiative to tidy up instead of standing about on placement,' 'thinking differently about things in more depth.'* Students also stated noticeable changes in their externalised behaviour including, getting out of bed earlier, doing more job searching and talking more to people e.g. *'Talking more to people I don't know (customers in shop)' 'trying to get a job, looking for jobs at weekends. Never did this before.'*

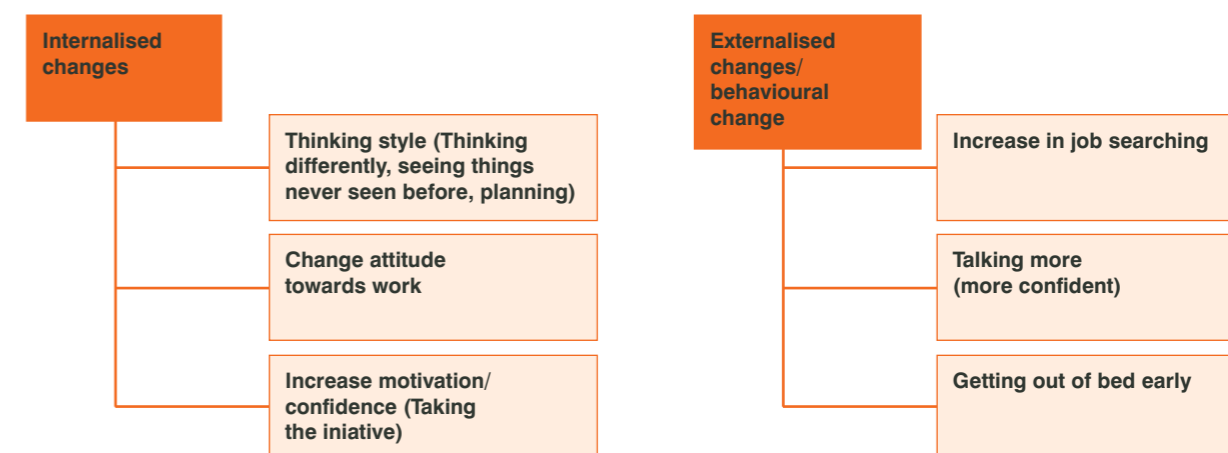


Figure 10 Thematic Map What students have noticed themselves doing differently since doing PX2

Students were asked if they had tried to implement any of the strategies referred to in the PX2 programme. Only 2 students responded to this question stating that they were using strategies and also aware of concepts referred to in the programme. In terms of strategies, one student reported that he/she was using them to be more confident, to set goals and thinking about things differently. The other student stated that they were using or were more aware of the PX2 concepts 'blind spots' and 'SCOTMOAS.'

Students were asked if PX2 had influenced or changed their approach to finding work either now or in the future. Six students reported areas of change with only 1 student saying that he/she was not doing anything differently (see Figure 11). Two key themes emerged from the responses: students were more intrinsically motivated to find work as their thinking had changed; they were more open to different types of job; and were more motivated to look for jobs. Students also engaged in more work finding activities such as handing out CVs and doing more job searching. This quote by one student illustrates both these themes:

'I have widened my variety, go to loads of websites, job centre and go into shops. Before I would have never gone into a shop. Definitely more confident. Looking for jobs all the time not just GRFW. Much more motivated to find work and organised.'

RESULTS

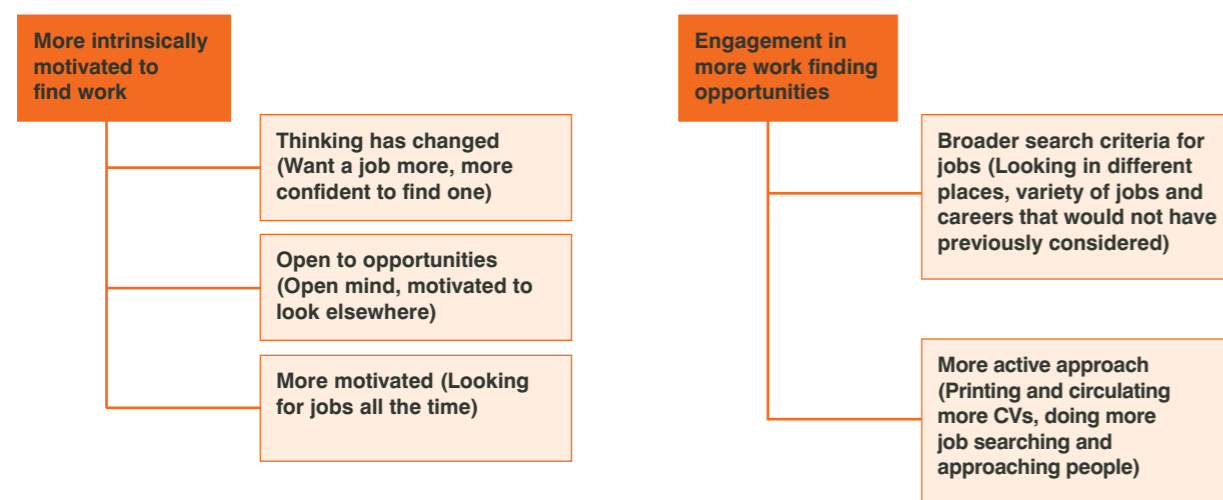


Figure 11 Thematic Map What students have stated is different about their approach to finding a job since doing PX2

Finally, students were asked about the most important thing that they remembered about PX2. Seven students responded to this question with 2 key themes emerging of PX2 concepts and PX2 strategies (see Figure 12). Specific concepts were explicitly mentioned by the students as well as key messages to be taken from the PX2 pack.

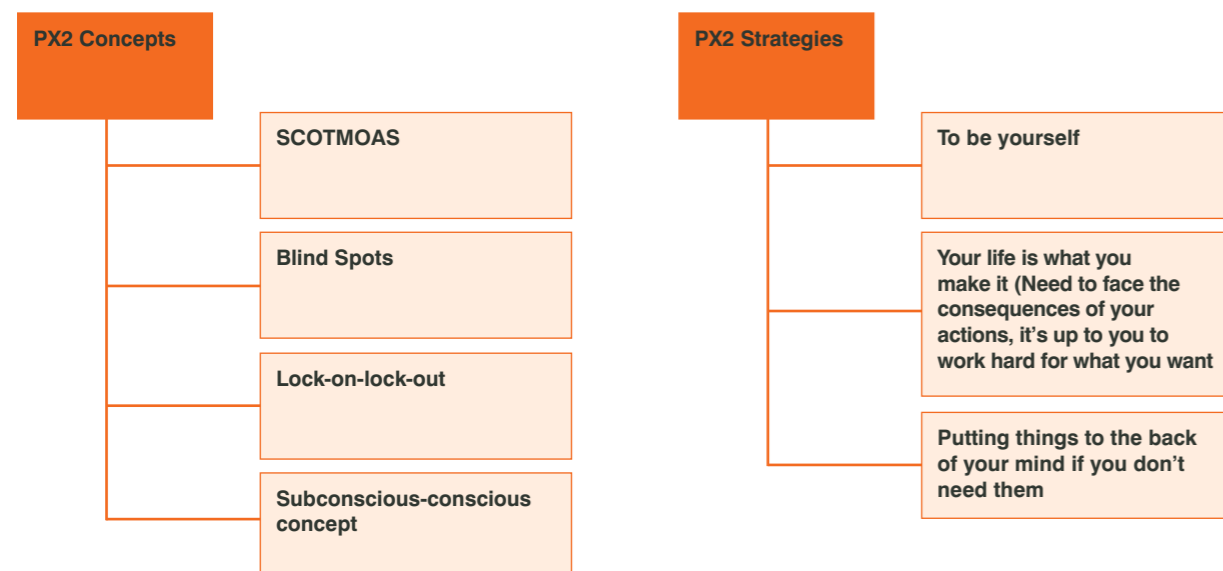


Figure 12 Thematic Map What students have stated as the one thing they remember about PX2

Performance across the measures and stated use of PX2 during post interviews

Individual gains over the 8 week period for the PX2 group in terms of the measures were outlined earlier (Table 18). In light of the interviews with the PX2 group six weeks after delivery, the students' performance in measures will now be viewed alongside their response during the interview (see Table 19).

This comparison was undertaken to further investigate whether individual student's gains in the utilised measures is supported by the student's reports of their subjective experiences. As can be seen from Table 19, the 4 students (3, 4, 8, & 9) who made the largest gains in scores (in 4 or more of the 8 measures) over the 8 week period also reported noticing changes in themselves, doing things differently and changing their approach to finding work. In addition to this, 1 other student (2) noticed these changes in themselves since doing the PX2 programme and was implementing some of the PX2 strategies.

Table 20 Individual comparison of positive scores gained across the measures between pre and post test and interview responses for PX2 group

Px2	Anything changed for you since PX2	Noticed yourself doing anything differently?	Implement any of the strategies	Has your approach to finding work changed measures	Positive Change between pre and post test in the questions (Total out of possible 8)	Total Overall out of 12 (8 measures +4 interview)
1 (M)	Yes	Yes	-	-	3	5
2 (M)	Yes	Yes	Yes	Yes	3	7
3 (M)	Yes	Yes	-	Yes	6	9
4 (F)	Yes	Yes	-	Yes	4	8
5 (M)	-	-	-	-	3	3
6(M)	-	-	-	-	2	2
7 (M)	-	-	-	Yes	2	3
8 (F)	Yes	Yes	-	Yes	5	8
9(F)	Yes	Yes	Yes	Yes	6	10

F= female M=Male



RESULTS

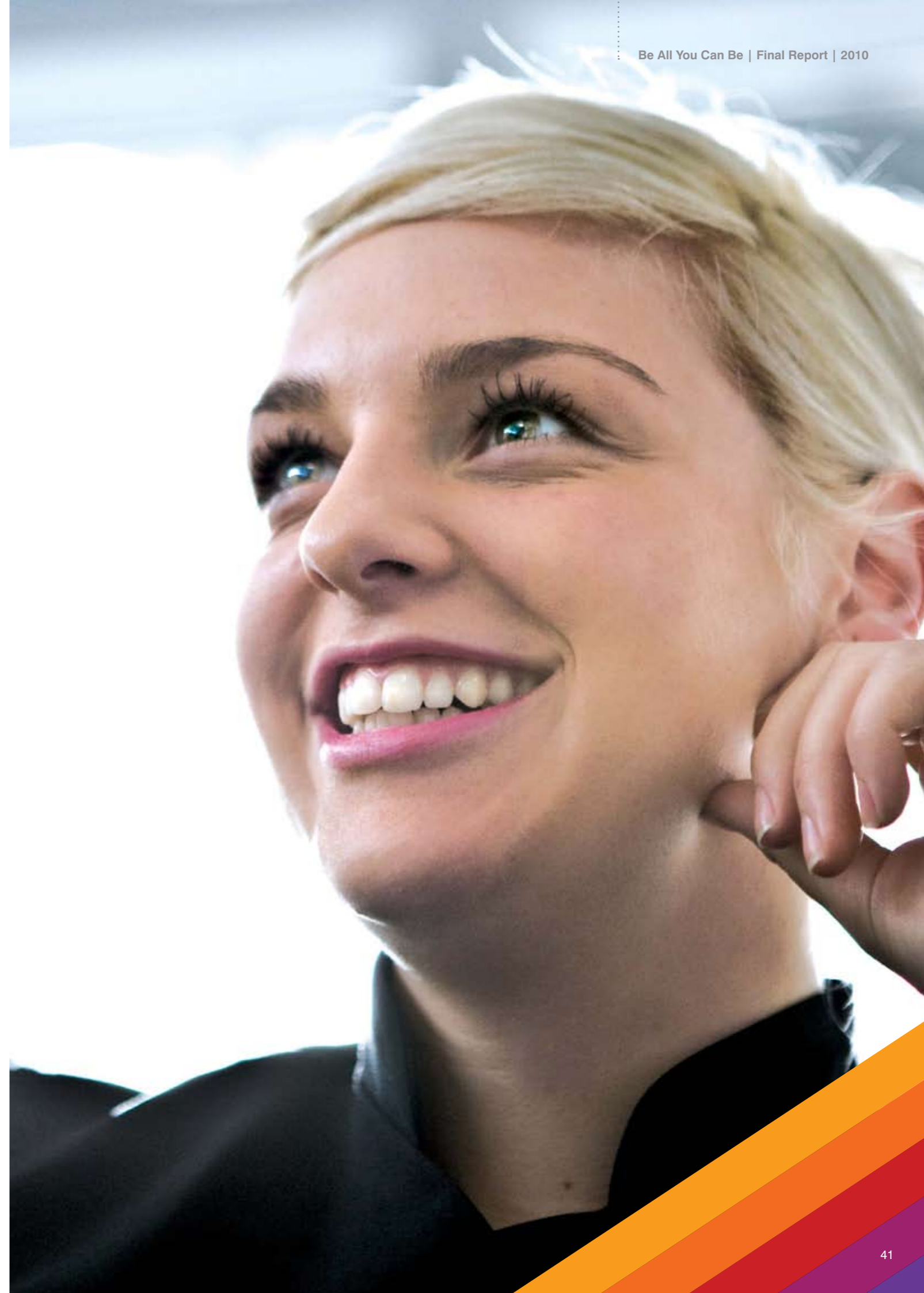
Post PX2 Destinations

To assess the longer term impact of the PX2 programme on the GRfW students, information on destinations of the students in November 2010 (9months following completion of the programme) was obtained from college staff. Information was available on 12 of the 16 students who participated in the PX2 programme. Findings from analysis of this data is summarised in Table 21.

Table 21 Destinations of PX2 students at 9 month follow-up point

Nature of Destination	Frequency
College placement	3
Employment (in place)	4
Employment (offered)	3
GRfW drop-in facility in college	2

Based on these findings, 10 of the 12 students had moved onto college placements; had been offered employment; or had taken up employment. Two of the students were continuing to use the drop-in facility at the college to investigate future options.



DISCUSSION

4.1 Strand 1 Training the Trainers

This strand of the research set out to answer the following research questions:

- What is the perceived impact of IIE training on the participants' professional development and personal growth?
- What is the perceived applicability of the PX2 programme to the participants' client group?
- What are the projected benefits of the PX2 programme for the students?
- How confident are the trained facilitators in delivering the PX2 programme?

What is the perceived impact of IIE training on the participants' professional development and personal growth?

With regard to the first of the research questions, the findings confirm that participation in IIE training had an impact on the participants' professional development and personal growth. In relation to the latter, there was a clear improvement in participants' general outlook and the majority of respondents reported that the training had led to new personal insights. These changing insights and perspectives had also translated into changing behaviour patterns. Participants reported that they had noticed changes in their reflection on events, in their actions, and in family relationships. In terms of professional development, the majority of participants reported that the training had an impact on how they thought about their working situation. Changes included implementing IIE strategies to aid professional development; increased awareness of things within the workplace; greater tolerance of colleagues and challenging colleagues. It was interesting to note that the participants had noticed themselves applying ideas and strategies in their work with young people, for example assisting them with goal setting and challenging their beliefs. Thus, it would appear that completing IIE training had an impact not only at an individual level but on others

with whom the individuals had contact in their personal (family members) and professional lives (colleagues and young people).

What is the perceived applicability of the PX2 programme to the participants' client group?

All of those completing PX2 training perceived it as being highly relevant to the young people they work with.

What are the projected benefits of the PX2 programme for the students?

Participants reported a number of perceived benefits of the PX2 programme for the young people they work with. Broadly, these could be construed as changes in personal insights and perspectives on the one hand and in changes in skills and observable behaviour on the other. The former included greater self-awareness; changes in attitudes towards life and work; and broadening of horizons. The latter included the development and application of a range of skills and strategies such as goal setting and ability to reflect on events.

How confident are the trained facilitators in delivering the PX2 programme?

Those completing the training were on the whole confident about using PX2 in their work with young people. At the end of the four day training, the majority (7/11) of participants felt confident in their ability to deliver the programme on their own. However, others sought additional support in the form of co-facilitating (with a PI representative or a colleague) or in further preparation.

4.2 Strand 2 Evaluation of the PX2 materials

This strand of the research was designed to address the following research questions:

- What are the students' perceptions of the materials?
- What are the facilitators' experiences of delivering the PX2 materials?

To address the question '*What are the students' perceptions of the materials?*' the findings highlight a positive response from both the individuals and the whole group (subjective and collective experience). Individuals rated the programme and concepts as interesting and useful; identified concepts that they felt would help them in multiple areas of their lives; set goals and strategies to achieve them; and recommended the programme to a friend. These results are highly similar to those obtained by the previous TPI evaluation (2010). Themes emerging through the facilitated discussion also pay tribute to the course delivery, course content and the impact that they felt the PX2 programme had had on them. In addition to this, the improvement suggestions were similar between the TPI (2010) study and the current study, with students advocating less DVD through the questionnaires (end of programme and individual STEPS) and the facilitated discussion. In addition to the improvements suggested in the TPI study, further recommendations for revision of the course content were provided in this study. Alike suggestions were advocated through the facilitated discussion and questionnaires relating in terms of the materials (DVD and booklet) as well as a documented difficulty in understanding some aspects, resulting in a request for more accessible language to be used. These improvement suggestions will help inform the future delivery of the PX2 programme to other students in the FE College and other contexts.

The facilitator diary was used to address the question 'What are the facilitators' experiences of delivering the PX2 materials?' The findings confirmed those found utilising other methods (self-report student questionnaires and facilitated student group discussion) with regard to the perceived utility of the range of PX2 concepts and specific suggestions for improvement.

1.3 Strand 3 Impact on the Get Ready for Work Students

This strand of the research set out to:-

1. Investigate the impact on the students-
 - Self-efficacy
 - Optimism
 - Resilience
 - Happiness
 - Mindset (Implicit theory of intelligence)
 - Locus of Control
2. Investigate changes in the students' career aspirations and expectations and goal setting abilities.

Group level analysis and discussion

In terms of '*investigating the impact on the students: self efficacy; optimism; resilience; happiness; mindset; and locus of control.*' the PX2 group made gains in 3 of the 6 measures, namely: LOT-R (Scheier et al., 1994); Subjective Happiness Scale (Lyubomirsky & Lepper, 1999); and the LOCC (Nowicki & Strickland, 1973). This indicated increases in the students' optimism, happiness and greater internalised perception of locus of control. However, the PX2 group only scored higher than comparison group at post test on 2 of the 6 measures, namely the: LOT-R (Scheier et al., 1994) and the Implicit Theories of Intelligence Scale for Children (self form) (Dweck, 1999). With regard to LOT-R, the PX2 group obtained higher scores for optimism and lower scores for pessimism than the comparison group; and for the Dweck scale, the PX2 group obtained higher scores indicating that individuals were closer to an incremental theory (growth mindset) although for this measure the post score was lower than pre score. In addition to this, there was a reduction in the PX2 students' scores on the Ego-resiliency scale (Block & Kremen, 1996) whilst the comparison group increased in their scores. These gains, higher scores or reductions compared to the comparison group are quite small and due to the small number of participants involved could not be subjected to any further statistical analyses.

These findings were not expected based on participants' gains in previous research of TPI programmes (May, 2007; OCF, 2008; Gorvett et al., 2000; STF, 2008) and PX2 publicity (Straker, 2009; TPI, n.d.). On the other hand, it should be noted that previous studies did not use comparison or control groups and judged impact by comparing the participants before and after on measures, or reporting impact through facilitators' subjective opinion or judgement. It could be argued that the present study is more rigorous in nature and highlights that even where the PX2 group make gains, these gains are also replicated by a comparison group over the 8 week period. Therefore, an effect of the PX2 programme cannot be demonstrated at the group level apart from showing an increase in their optimism and decrease in pessimism as measured by the LOT-R.

A possible explanation from the literature to describe the effect of a small increase in optimism and decrease in pessimism scores compared to the comparison group is from positive psychology and the work of Seligman (2002; 2006). In theory it should not have been expected for students to make large gains in optimism after PX2 and drastically reduce their pessimism scores based on writings of Seligman and Diener (cited in Bonniwell, 2008). As noted previously, Seligman's main aim in terms of learning a more positivistic thinking style is not to lead to blind optimism but to promote a non negative thinking style (Seligman, 2006). This is in order to introduce a more realistic thinking style containing 'mild pessimism' (Seligman) where the individual can accurately estimate their skill level and entertain the right amount of optimism and pessimism. Diener (cited in Bonniwell, 2008) also proposes that "*...it might not be desirable for an individual to be too optimistic; perhaps people are better off if they are a mix of optimism and pessimism*" (p.20). It could be argued that this is what is obtained here for the students due to the evidence of pessimism existing in a small amount.

DISCUSSION/CONCLUSION

A possible explanation for increases in the comparison group in the absence of the intervention is the phenomenon called the 'Hawthorne Effect' (Davies, Ross, Wallace & Wright, 2003). This is where participants enhance or modify their behaviour due to being experimentally studied or measured. During this study, the comparison group members were made fully aware that another GRfW group was receiving a new package. They had no other investment in the research other than their participation. In some respects this may have motivated the students to perform as well as they could, thinking very carefully about their answers and responses to provide what they thought the researcher was looking for. In addition to this there are three further explanations taking environmental factors into account that may have methodologically influenced the findings. Firstly, how comparable were the groups in the first place? The groups were only matched out of convenience and based on college staff advice that they were the 'same programme but on different campuses.' No further attempt was made by the researchers to match participants. Secondly, tutors involved with the comparison group had undergone IIE and PX2 training as professional and personal development courses. Due to this, potential leakage of the approach, principles, concepts and teaching style may have occurred and contributed to the improvement in scores on the measures. The researchers are mindful that the results from Strand 1 documented facilitators' reported changes in themselves, their approach to others and within their working environment. Finally, only a small number of participants could be matched pre/post due to the student attrition rate. In the PX2 group, a number of students had left the course and gone onto employment; and in the comparison group some students had left and gone onto employment whilst others were on work placements.

With regard to '*changes in the student occupational aspirations and expectations*' the PX2 group appear to bring their expectations in accordance with their aspirations, whilst for the comparison group the opposite occurs whereby they lower their aspirations to match their expectations. A possible interpretation of these findings is that the PX2 group may be more inclined to believe that they will be capable of achieving their higher career aspirations in spite of the environmental factors that they currently face and that if they try hard enough they will achieve.

In relation to '*changes in students' goal setting*' the main priority in terms of goal attainment for both groups is moving onto a positive destination after the course namely onto a further college course or employment and passing their driving test. These are all very feasible immediate goals for a 16 and 17 year old population. However, it appears that the PX2 group before and after the PX2 programme were more aware of their personal role in attaining their goals and what they want to achieve by internalising the strategy they will use to achieve their goal. This is in contrast to taking external practical steps to goal achievement. Also, within the PX2 group, after the programme they reported more expected success in terms of goal achievement. This implies that they are now more confident they will achieve the goals they set for themselves than they were previously.

Individual level analysis & discussion

The results for the PX2 group examined at the individual level demonstrate a more favourable picture of gains after the intervention. Female students in particular showed increases in measures, highlighting that PX2 may have had an effect on them. However for males there appears to be little change.

In order to complement and triangulate these findings, the post PX2 interview was conducted to explore '*the students' subjective experience of the impact of PX2.*' It appears from the findings that some of the students felt that there had been positive changes in themselves, their behaviour and in relation to their work finding approaches and motivation, due to the PX2 programme. These reported changes correspond with the claims and expectations made by TPI (n.d; Straker, 2009). To an extent these findings appear to contradict the lack of variation between the two groups in relation to the measures.

Post PX2 Destinations

The findings from the longitudinal follow-up investigation provide a very positive picture in terms of positive destinations for those students who took part in the PX2 programme.

CONCLUSION

This research was undertaken as part of a wider collaborative project to address the perceived need for an independent evaluation of a new Pacific Institute programme aimed at 14-19 year olds. An extended term mixed method (ETMM) model, with three research strands, was utilised to evaluate the facilitators' training; the PX2 materials; and the impact of PX2 on a target group of students participating in a Get Ready for Work programme. Those who had completed the IIE training reported benefits in terms of their personal development and application to their everyday lives. Trained facilitators were very positive about the relevance and perceived benefits of the programme for the young people they work with. Although overall the PX2 students and their facilitator were very positive about the programme, they recommended a number of improvements. At the group level, in terms of impact, the PX2 group outperformed the comparison group by increasing their scores and obtaining a higher score overall for optimism. The PX2 group also demonstrated an enhanced approach to goal attainment and appeared to have more confidence in their abilities to achieve their goals. At the individual level, gains achieved through PX2 may become more apparent over time based on subjective reports about PX2 effects. It appears at this level that those for whom PX2 has had an effect it has worked well. For those for whom it appeared that no had change occurred, it is suggested that the individuals did not engage with the programme or struggled with the language and level of the programme.

REFERENCES

- Bandura, A. (1997). *Self efficacy: The exercise of control*. New York: Freeman.
- Beal, S.J., & Crockett, L.J., (2010). Adolescents occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Developmental Psychology*, 46(1), 258-265.
- Blackwell, L.S., Trzesniewski, K.H., & Dweck, C.S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and intervention. *Child Development*, 78(1), 246-263.
- Block, J., & Kremen A.M. (1996). *IQ and ego-Resiliency: Conceptual and empirical connections and separateness*. *Journal of Personality and Social Psychology*, 70, 349-361.
- Bonniwell, I. (2008). *Positive psychology in a nutshell* (2nd ed.). London: Personal Well-Being Centre.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- British Psychological Society (BPS). (2004). *Ethical guidelines*. Leicester: BPS.
- British Psychological Society (BPS). (2009a). *Code of ethics and conduct*. Leicester: BPS.
- British Psychological Society (BPS). (2009b). *Ethical principles for conducting research with human participants*. Leicester: BPS.
- Chatterji, M. (2004). Evidence on "what works": An argument for Extended-Term Mixed Method (ETMM) evaluation designs. *Educational Researcher*, 33(9), 3-13.
- Coolican, H. (2004). *Research methods and statistics in psychology* (4th ed.). London: Hodder and Stoughton.
- Craig, C. (n.d). Centre for confidence and well-being resources. Retrieved January 11, 2010, from <http://www.centreforconfidence.co.uk/resources.php?p=cGikPTM1JmlkPTQyMg>
- Creed, P.A., Patton, W., & Bartum, D. (2002). Multidimensional properties of the LOT-R: Effects of optimism and pessimism on career and well-being related variables in adolescents. *Journal of Career Assessment*, 10(1), 42-61.
- Davies, J., Ross, A., Wallace, B., & Wright, L. (2003). *Safety management: A qualitative systems approach*. London: Taylor & Francis.
- Dweck, C. S. (1999). *Self-Theories: Their role in motivation, personality and development*. Philadelphia: Psychology Press.
- Festinger, L. (1957). *A theory of cognitive dissonance*. California: Stanford University Press.
- Frederickson, N. & Dunsmuir, S. (Eds.) (2009). *Measures of children's mental health and psychological well being: A portfolio for education and health professionals*. London: GL Assessment Ltd.
- Gorvett, G., Noble, M., Proudfoot, J., & Reeves, B. (2000). *Evaluation of 'Breakthrough to Excellence' a program for disengaged youth*. Kent: Kent and Medway Council.
- Letzring, T.D., Block, J., & Funder, D.C. (2005). Ego-control and ego-resiliency: Generalization of self-report scales based on personality descriptions from acquaintances, clinicians, and the self. *Journal of Research in Personality*, 39, 395-422.
- Lyubomirsky, S., & Lepper, S. H. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46, 137-155.
- May, R. (2007). *Interim evaluation report: Enham 'Made' for success*. Thoughtways: Enham.
- Nowicki, S., & Strickland, B.R. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology*, 40, 148-154.
- Oldham Children's Fund. (2006). *Examining the impact of Oldham's Children's Fund's Steps to Excellence for Personal Success (STEPS) Project 2005-2006*. Oldham: Oldham Children's Fund.
- Oliver, L. (2009). *Background and positioning: Development and work done so far PX2*. Presentation provided at the Scotland Launch of Pathways to Extreme Success (PX2) at Glasgow City Chambers, Glasgow, December 3 2009.
- Robson, C. (2002). *Real world research* (2nd ed.). Oxford: Blackwell.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063-1078.
- Schooler, J. (2009). *Raising aspirations. Caldervale High School, NHS Lanarkshire and the Pacific Institute*. Presentation provided at the Scotland Launch of Pathways to Extreme Success (PX2) at Glasgow City Chambers, Glasgow, December 3 2009.
- Schoz, U., Gutiérrez-Doña, B., Sud, S., & Schwarzer, R. (2002). Is general self efficacy a universal construct? Psychometric findings from 25 countries. *European Journal of Psychological Assessment*, 18(3), 242-251.
- Seligman, M.E.P. (2002). *Authentic happiness*. London: Nicholas Brealey.
- Seligman, M.E.P. (2006). *Learned optimism: How to change your mind and your life*. New York: Vintage Books.
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, 7(17), (no page numbers). Retrieved April 7, 2010 from <http://PAREonline.net/getvn.asp?v=7&n=17>
- Straker, N. (2009). *How PX2 equips young people today*. Presentation provided at the Scotland Launch of Pathways to Extreme Success (PX2) at Glasgow City Chambers, Glasgow, December 3 2009.
- The Pacific Institute (TPI). (2009). *PX2 facilitators manual*. London: The Pacific Institute@.
- The Pacific Institute (TPI). (2010). *PX2 summary report: Based on 101 evaluations received*. London: The Pacific Institute@.
- The Scottish Training Foundation (STF). (2008). *NEET challenge funding 2007/8: Breakthrough final report*. Glasgow: Scottish Training Foundation.
- Tugade, M.M., & Fredrickson, B.L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320-333.



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