

A FRAMEWORK TO ASSIST WOMEN RETURNING TO STUDY

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ABSTRACT

This paper details the research findings concerning the perceived needs of Women into Science and Technology (WIST) bridging program students at the commencement of their student journey. The outcomes of the research were then used for the development of a student support framework entitled *Get SET for Study*. This framework can be used by students and staff as a tool to assist students plan their student journey.

KEYWORDS

enabling –bridging – women – university – science - technology

INTRODUCTION

An increasing number of women are returning to study as mature age students. Typically, in order to gain entrance into a university course, these women are encouraged to undertake a bridging program. This research is based upon the Women into Science and Technology (WIST) bridging program which was established in 1989 to increase accessibility to women entering the Faculty of Science at Central Queensland University. Nowadays the WIST program is available to all women seeking to return to study. The WIST program is flexible and self-paced, and annually enrolls over 400 students. The WIST program can be deemed as one of the first steps in the student journey.

This paper reports on the results of a research study which was conducted to identify the needs of women as they return to study. The research was designed to identify the expressed needs of women through the use of a survey instrument which was informed by focus groups and interviews conducted with stakeholders. The survey results were then used to develop a support framework. This framework is presented in this paper.

LITERATURE REVIEW

A review of the literature conducted by (Donovan 2008) revealed that adult learners and women in particular have a range of specific needs and challenges when enrolling in university. In his seminal work, Knowles (1984) identified that adult learners can be characterised by their need to focus on studying what is currently relevant and useful to them. Consequently, they are goal directed and they need to relate their current learning to their prior knowledge. Adults are usually highly motivated when they return to study and they learn best when they experience the learning. Knowles

(1984) also identified that adults prefer to have an input into the design and the evaluation of their instruction.

The author reviewed literature on adult learners' needs and challenges and found that their previous academic background, their personal and financial circumstances and their multiple roles and responsibilities impacted on their success at university. Donovan's (2008) review identified that: adult learners require support from their educational institution; support from their family and friends; and support in the form of remediation.

Specifically, it was revealed in the research literature that women required access to university staff, prompt feedback and appropriate course materials (Rahman 2002); financial support (Goodman & King-Simms, 2005; Johnson, 1996; Kantanis, 2002; Rahman, 2002); systems that facilitate networking and communication between course participants (Macrae & Agostinelli 2002); an environment that is caring and safe and promotes learning (Bankert & Kozel, 2005; Trapp, 2005); and a feeling of a sense of belonging. Scott (2006) found that providing a total experience of university also reduced attrition in university courses.

The critique of all the foregoing literature identified two gaps. The first gap concerns the identification of the needs and challenges of women who are enrolled in bridging programs. The literature appeared not to distinguish between the needs of men and the needs of women. The competing demands of family, study and, in some cases, work, have been identified as barriers for women as they engage in higher education. The notion of women as carers or nurturers comes to the fore as a challenge that women are faced with when they take on the additional role of a student. Thus whilst the review identified the needs of adult learners, there is a gap in the knowledge of the current needs and challenges of women who are returning to study through the use of bridging programs.

The second gap in the literature is in the area of frameworks. While the literature identified a number of frameworks which could be used to provide support to students when they return to study, there did not appear to be frameworks specifically designed for women enrolled in bridging programs.

THEORETICAL FRAMEWORKS FOR STUDENT SUPPORT

The literature described two frameworks designed to reflect the needs and challenges that confront students as they make the transition to university. The *Framework for Student Engagement and Mastery at University* was developed by Lawrence (2004) as a tool for identifying the nature of the skills required by students in their understanding and mastery of university culture. These skills include independent learning, critical thinking, life management skills and discipline and subject discourses. Lawrence (2004) developed the *Model for Student Success Practices at University* which identified three practices for ensuring students' successful transition to and perseverance with the university culture. These practices are as follows:

- Socio-cultural practice, including seeking help, information and feedback, participating in a group, expressing disagreement and refusing requests
- Reflective practice including observation and listening, reflection before, during and after practice
- Critical practice including critical self-awareness and critical discourse awareness (Lawrence 2004).

While the *Framework for Student Engagement and Mastery at University* identified the relevant skills required to successfully negotiate the unfamiliar university culture, the *Model for Student Success Practices at University* identified the practices needed to succeed at university.

Another framework for student support describing the affective, systemic and cognitive domains initially developed by Tait (2000), was used by Smith and Burr (2005) as a basis to provide online support to first year students. The framework included three domains representing three areas of support provided by student services.

While the above frameworks describe the needs of students in academic terms, the words and phrases might not be part of the vernacular of potential bridging program students. Similarly,

the literature review did not identify frameworks that were designed for women undertaking a bridging program. The frameworks described above can, however, be deemed useful in the design of a more encompassing support framework for bridging students.

From another perspective, the notion of Learning Communities (Longworth 1999) and Communities of Practice (Lave & Wenger 1991) have the potential to contribute to the design of a support framework for students. Learning Communities are based on principles of sharing and developing knowledge, whereas Communities of Practice have a more specific focus where the information shared, is related to a practice or an interest that is common to the members.

The foregoing considerations have been deployed in this research in the methodology and for the development of the support framework.

METHODOLOGY

A survey instrument was specifically developed for the purposes of the research. In the design of the survey instrument, the themes identified in the literature review, the focus groups with WIST students and interviews conducted with CQU staff were used to inform the statements in the survey instrument (Donovan 2007). Four focus groups each comprising of between four and six WIST students were undertaken to identify the needs and concerns of the students. Interviews were then conducted with 12 university staff associated with the WIST program. This was done for two reasons: to verify themes that had been identified in both the literature and in the analysis of the focus group data; and, to provide a further clarification of the themes that had been identified in the literature and the focus groups. The data obtained from the focus groups and the interviews was analysed through a process of reading the transcribed discussion and identifying and coding themes. This process also enabled the organization of the survey instrument into themes for the purpose of more effectively engaging students with the survey.

The list of themes generated from the above process and used in the survey instrument were:

- Need for practices or skills including time management, and "being organized"
- Need for changed attitude, to be motivated and determined
- Services including childcare, family support and information sessions

- Course content which is easily understood
- Interaction; working in groups

The survey was administered on-line and was also made available in hard copy format (Donovan, 2007).

SURVEY DATA ANALYSIS AND RESULTS

A total of 239 WIST students (52%) responded to the survey. Initial frequency analysis was carried out on the total responses received (n=239) to determine the overall trends of the responses. Additional statistical analysis of the data was conducted to determine if there were any differences in the WIST student group when analysed by age, by carer status, by location and by current status as an active or an inactive student.

The influence of student type

T-test analyses of the results showed that, in comparison with women over thirty, women under thirty years old:

- placed less importance on the need to prioritise
- were less motivated to network
- placed more importance on mentoring and support from friends, and
- were more strongly motivated to study for career planning purposes.

Similarly a t-test was conducted on the survey results with the sample divided into carers and non-carers. In that comparison those women with caring responsibilities:

- placed more importance on family support, and
- were more likely to feel guilty about taking time from their children when studying

This result suggests that women are reluctant to study when they are responsible for the care of others.

When women were compared according to their location, women who lived in towns whose populations were less than 15,000

- placed less importance on time management, encouraging feedback and the need to feel “welcomed” than those from the larger regional centres
- placed more importance on being exposed to inspirational stories and being treated by the institution as a “name” rather than a “number”.

The analysis also revealed statistically significant results for two further aspects. These were:

- active students placed more importance on studying for their career path, and
- inactive students placed more importance on being able to contact WIST staff.

Factor Analysis

A factor analysis of the survey data provided a factor solution for a grouping of the variables into eight factors. The factors were described as follows:

- Factor 1 *Group Work Support* - aspects concerning support provided for students through groups and networks for study and related support
- Factor 2 *Mattering* – a sense of belonging and the need to feel that a student “matters” through encouraging support provided by the university
- Factor 3 *Family Support* - the support provided by family and significant others to assist students to succeed at their studies
- Factor 4 *Study Capability* - students’ study skills and practices
- Factor 5 *Study Skills* – aspects concerning the need for students to plan, to establish, and to set priorities
- Factor 6 *Study Actioning* - the need for students to allocate sufficient time for study and to seek support from friends, other students and the university
- Factor 7 *Women’s Needs* - the needs which impact on the types of assistance, support and encouragement required for study
- Factor 8 *Circumstances* – aspects concerning the individual personal circumstance issues of students which impact on their success.

The eight factors are able to be collapsed to represent the four components for a framework called *Get SET for Study*. The four components are listed below and are shown in Figure 1.

1. **Support network:** Having family and significant others for support
2. **Study capability and capacity:** Possessing study skills, study capacity and having peer support
3. **Learning community:** Having the feeling that their presence matters to the university
4. **Support and resources access:** Having the capacity to meet their financial and other personal needs.

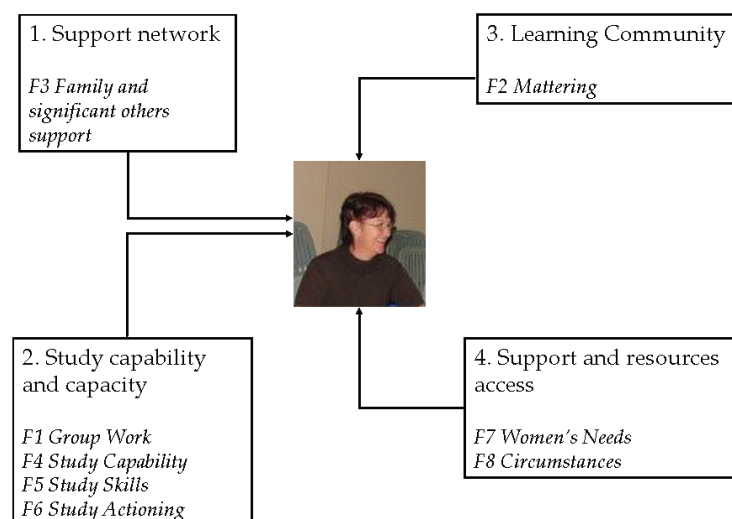


Figure 1 Framework for WIST students' needs and challenges when returning to study

Component 1 – Support Network. This represents the support provided by the student's family and friends. This research reveals that a supportive family was important. This component also represents the support that students can provide to themselves through the use of personal organizational skills. These skills result in personal gains to the student. Underlying this component is the assumption that students require a support network in order for them to succeed when they return to study.

Component 2 – Study ability and capacity. This refers to the capacity to develop and to implement study and associated skills. The development and the implementation of these skills can be assisted by peer support provided by a learning community within the WIST community of practice. Such a community can provide social connectedness that is important for learning (Fukuyama 1999).

Component 3 – Learning Community. This component reflects the importance of the students believing that their presence matters to the university. The feeling of being treated as a "name" rather than as a "number" can reduce the feelings of isolation that some flexible students experience. (Smith & Burr 2005).

Component 4 – Support and Resource access. This component recognises that women have specific needs which in some cases are gender specific and in other cases are related to the need for childcare, financial support and career advice.

CONCLUSIONS

In terms of student readiness for study this research has identified a framework which represents the major needs and concerns of women as they return to study. These largely confirm the needs as identified in the literature. The *Get SET for Study* framework can be used as a visual representation by university administrators to assist students to effectively make the transition into university. As these components have been identified by the students themselves as their perceived needs, prospective students could be more likely to respond positively to the use of the framework.

The results of this research can be used for two purposes, namely, to assist women enrolled in the WIST program and to lead to further development and research in this area. *Get SET for Study* can be used by both students and staff when the student makes initial inquiries about studying and also during their course of study. Students often feel apprehensive about returning to study so the use of a visual representation of what is needed to support students can underpin discussions with prospective students regarding the factors that they need to consider when returning to study. Factor 2 *Mattering* identified in the Factor Analysis intimates that the process of engagement is more likely to be successful if students feel valued and that their presence matters to the university. The process of discussing the four components of the framework with prospective students is likely to successfully engage with students as the components of the framework reflect the current needs of the student cohort.

Similarly, as students progress in their particular course, *Get SET for Study* can be used to evaluate students' current strengths and to identify areas where they require either further support or skill development.

Get SET for Study could also be used as a visual representation that could assist university staff to establish student's positioning within the framework and also within the broader context of academic study.

In summary, the *Get SET for Study* framework can provide a tool to establish the level of support that a student currently has or is able to access. The framework can assist students to establish their readiness for university and their level of commitment to further study.

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