

WEB-BASED TOOLS TO OPTIMISE ACADEMIC PERFORMANCE BY FACILITATING THE DEVELOPMENT OF WELLNESS FACTORS THAT AFFECT ACADEMIC ACHIEVEMENT

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Abstract

Our university adopted a wellness model that looks at wellness in terms of the physical, emotional, intellectual, occupational, social and spiritual dimensions. A comprehensive literature study revealed that wellness related factors from all six dimensions (for example physical exercise, emotional intelligence, self-control, grit, hope, optimism, type of mindset, equanimity, positivity, character strengths, curiosity and mental toughness) affect academic achievement. Academic support efforts at our institution are largely based on this model – it therefore also includes designing support programmes, digital (internet-based) and traditional, to develop each of the six wellness dimensions and to address the needs associated with specific wellness related factors that affect academic achievement. The digital component includes the design of a collection of web-based wellness surveys, websites and multimedia products that support wellness development. These tools are potentially available to mentors, life coaches and students and can be used in structured and unstructured programmes. A number of these tools have been implemented, is used in research and support programmes and is available on the intranet to students and staff. The tools also include a tracking component and all interactions with students are recorded. Every user can keep track of his wellness efforts by studying his individualised member's page. The university can also monitor the overall wellness and progress of students.

Keywords: Wellness factors, academic achievement, web-based tools, multimedia, tracking.

1 INTRODUCTION

In "Wellness Coaching for Lasting Lifestyle Change" Arloski [1] defines wellness as follows: "Wellness is a conscious, self-directed and evolving process of achieving full potential. Wellness is multi-dimensional and holistic (encompassing such factors as lifestyle, mental and spiritual well-being and the environment). Wellness is positive and affirming."

This implies that wellness will help people to achieve their potential, that wellness recognizes and addresses the whole person in all of his dimensions and that wellness affirms and mobilizes people's positive qualities and strengths. The implication for higher education is that in order for students to reach their full potential and perform according to their abilities they must be well in all of their dimensions.

Stellenbosch University (SU) adopted the wellness model of Bill Hettler (co-founder of the National Wellness Institute) [1]. His model is a comprehensive and inclusive model that looks at wellness in terms of six dimensions, namely physical (PD), emotional (ED), intellectual (ID), occupational (OD), social (SD) and spiritual (GD). Since its inception in 1976 this wellness model has served as one of the most common ways to allocate resources for wellness programmes.

Academic support efforts at SU are largely based on this model. It includes designing support programmes, digital and traditional, to develop each of the six wellness dimensions (PD, ED, ID, OD, SD and GD) and to address specific wellness related factors that affect academic achievement. The digital component includes the design of a collection of web-based wellness surveys, websites and multimedia products and its description is the one aim of this paper. The other goal is to report briefly the results of a literature study that was undertaken to identify specific wellness factors that affect academic achievement and which were consequently chosen as the topics of these web-based tools.

The paper will first focus on the relationship or link between wellness and academic performance before the web-based tools that were designed will be described.

2 THE LINK BETWEEN WELLNESS AND ACADEMIC PERFORMANCE

Research results from various international studies are listed in this section to demonstrate the link between wellness and academic performance – the first part reports findings from studies that looked at the influence of wellness in the context of wellness models (like Hettler's) and the second part concentrates on findings regarding specific factors that affect academic achievement, like physical exercise, emotional intelligence, self-control, grit, hope, optimism, type of mindset, equanimity, positivity, character strengths, curiosity and mental toughness. The wellness dimension(s) to which each of these specific factors belong, will be highlighted, for example, physical exercise belong to the physical dimension (PD) and equanimity belong to the spiritual dimension (GD). The profile of a "perfect" student will also be described.

2.1 Wellness models

Ballentine [2] examined the relationship between self-reported wellness and academic success in first-year health science college students and whether wellness factors could be used to predict academic success. Wellness was defined using the Myers and Sweeney [3] conceptual framework, as measured in a series of constructs, including the coping self, creative self, essential self, physical self, social self and an overall wellness score. Academic success was defined as first semester grade point average (GPA). The findings suggest certain factors of wellness can be used to help predict academic success in the first semester of college.

Howell [4] investigated second-year college student wellness behaviours and their relationship to academic achievement. Hettler's model of wellness was used. Howell [4] found that for second-year college students who reported wellness behaviours nutrition moderately predicted academic achievement, and that nutrition, emotional management, physical fitness, and occupational wellness were associated with academic achievement.

Goss [5] investigated the relationship between wellness and academic success and found that higher achieving students rate their wellness at a higher level. This study was done in Australia and also used Hettler's model of wellness. Total wellness scores at both the beginning and end of the semester that was studied were consistently positively correlated with final grade and GPA. The physical and spiritual dimensions retained consistent significant positive correlations while there were greater variation in correlations with academic achievement across time among the other wellness dimensions. A study that was done in America by DiMonda [6] that also used Hettler's framework obtained similar results.

Horton and Snyder [7] investigated the impact of wellness activities and habits on student grades. The students in their study tracked and reported how they spent their time relative to seven wellness dimensions over a 2-week period. They found that the physical, social, environmental and occupational dimensions all affect a student's GPA. They conclude that their data suggests that academic success, as measured by grades, is best achieved through balanced wellness. Sari's finding [8] that students with high GPA's score higher on specific wellness dimensions than students with low GPA's supports Horton and Snyder's results.

At Stellenbosch University Botha & Du Plessis [9] used cluster analysis and neural network prediction models to mine performance and wellness data of first-year engineering students to identify factors that may cause underperformance. Wellness data obtained from a profiling questionnaire and biographical information were combined with Grade 12 and university performance data in neural network models to predict first-year success, first- and second-year retention and success in the minimum period. Correct classification rates of above 80% were obtained and the wellness related variables played a very significant role in these predictions. A cluster analysis confirmed the relationship between wellness and academic performance.

2.2 Specific wellness factors

Specific wellness related factors that have been shown to affect academic performance are described in this section. The relevance of each is supported by one or more research results from our literature study. The wellness dimension(s) to which each of these specific factors belong are also indicated.

2.2.1 Physical exercise

In "Spark: The Revolutionary New Science of Exercise and the Brain" Ratey [10] explains how dramatic breakthroughs in brain research during the last 20 years have illustrated the connection

between exercise and improved mental fitness. Not only does exercise build muscles, it literally builds and rebuilds parts of the brain.

The Zero Hour physical exercise programme at Naperville in America illustrates this: Participation in Zero Hour physical activity before school started led to dramatic improvement in academic achievement. On the Trends in International Mathematics and Science Study (TIMSS), Naperville students finished first in the world in science and sixth in math, behind Singapore, Korea, Taiwan, Hong Kong and Japan. Because Naperville is a “demographically advantaged school district,” Ratey looked at poorer communities where Naperville-style physical exercise programmes were applied. In Titusville, Pennsylvania, similar results occurred. Since implementing the program, scores in Titusville went from below the state average to 17 percent above the state average in reading, and to 18 percent above in math.

This factor belongs to the physical dimension of wellness.

2.2.2 Hope and optimism

In research with 3920 college students at the University of Kansas [11] it was found that the level of hope among freshmen at the beginning of their first semester was a more accurate predictor of their college grades than were their SAT (Scholastic Aptitude Test) scores or their grade point averages in high school, the two measures most commonly used to predict college performance.

In a study of learned optimism, Seligman [12] tested 500 members of the freshman class at the University of Pennsylvania. He found that their scores on a test of optimism were a better predictor of actual grades during the freshman year than SAT scores or high school grades. Studies on the correlation between optimism and academic performance conclude that, as with hope, optimism predicts academic success.

Hope and optimism belong to the emotional and intellectual dimensions of wellness (ED & ID).

2.2.3 Self-determination, goals and mindset

Dr Kennon Sheldon of the University of Missouri tested the validity of the concept officially known as self-determination theory. This theory says people are happiest when they are able to make their own choices. Sheldon investigated the goal of doing well during the first year of college [13]. He sorted out a large group of incoming freshmen according to the source of their goals. He divided them into two basic groups – those who had created their own college goals and those who had not. He found that those who had created their own goals were much more likely to achieve them. He also found that this initial success could be a springboard for continued achievement, if students kept reaching their goals.

Dweck [14] distinguishes between two types of mindsets, namely a fixed and a growth mindset. People with a fixed mindset think that intelligence (and other abilities) is something very basic about you that you cannot really change very much and that you can learn new things, but you cannot really change how intelligent (or how good at something) you are. People with a growth mindset, however, believe that no matter how much intelligence you have, or how good you are at something, you can always change it quite a bit and substantially change how intelligent (or good at something) you are. The growth mindset is associated with “get-better” goals and the fixed mindset with “be-good” goals [15].

Where being good is about proving how smart you already are, getting better is about developing skills and abilities - about getting even smarter. Halvorson [15] found that learners who see their goals in terms of getting better - who see a less-than-perfect grade on a math assignment as a signal to try harder, rather than as evidence of "not being good at math" - benefit from this outlook in many ways. They find classroom material more fun and interesting, and process it more deeply. They are less prone to anxiety and depression than their be-good peers. They are more motivated, persist longer when the going gets tough, and are much more likely to improve over time.

Individuals possessing each of these mindsets tend to be evenly distributed in most populations and their mindsets normally tend to be stable over time. Research has also shown that targeted interventions can create a long-term shift in mindset [14]. Numerous studies have demonstrated a causal link between a growth mindset and academic achievement, and students possessing it have a distinct advantage over those with a fixed mindset, especially in challenging situations [16].

Mindset has also been used to predict academic achievement in math and science, and mindset interventions have been demonstrated effective in improving academic performance over time and reducing intergroup differences in math and science achievement [17].

These factors are part of the intellectual dimension (ID) of wellness. They may also belong to the occupational dimension (OD), especially self-determination.

2.2.4 Grit, self-control, self-discipline and conscientiousness

Angela Duckworth of the University of Pennsylvania and her fellow researchers ([18], [19]) proposed that individuals who possess a drive to tirelessly work through challenges, failures, and adversity to achieve set goals are uniquely positioned to reach higher achievements than others who lack similar stamina. They found in a series of scientific studies that higher levels of grit were more highly associated with cumulative grade point average in an Ivy league sample when compared to those with lower grit levels; that grit predicted retention after their first summer in two classes of cadets at the United States Military Academy; and that participants in a National Spelling Bee with higher grit scores typically work harder and longer than less gritty peers, ultimately resulting in better performance. This series of studies provides empirical evidence that an individual difference conceptualized as grit can account for significant variance in performance across a variety of settings.

Wolfe and Johnson [20] found that self-control was the only one among 32 personality variables that contributed significantly to prediction of grade point average among university students. Tangney, Baumeister and Boone [21] found that for college students grade point average was significantly related to self-control. People with higher self-reported self-control had better grades than those reporting low self-control, consistent with Wolfe and Johnson's finding that self-control makes a significant contribution to academic success. Tice and Baumeister [22] studied the costs and benefits of procrastination (lack of self-control) and concluded that procrastination is a self-defeating behaviour pattern marked by short-term benefits and long-term costs. Procrastinators also received lower grades on all assignments in their study.

Duckworth and Seligman [23] found that students with a strong sense of self-discipline significantly outperformed their less-disciplined peers on a range of academic indicators, including grades, achievement test scores, and attendance. Additionally, self-discipline appears to be a better predictor of academic gain than is intelligence (as measured by an IQ test).

Chamorro-Premuzic and Furnham [24] investigated the extent to which personality traits predict academic performance and found that the Big Five personality factors, particularly neuroticism and conscientiousness, predict overall final exam marks over and above several academic predictors, accounting for more than 10% of unique variance in overall exam marks. Results indicated that neuroticism may impair academic performance and conscientiousness may lead to better academic results. Conrad and Patry's research [25] also found a strong positive relationship between conscientiousness and academic performance as measured by final grades. Their research indicates that of the Big Five personality traits, only conscientiousness has consistently been associated with academic achievement. According to Conrad and Patry [25] a vast amount of research illustrates that conscientious students achieve higher levels of academic success, both in high school and university. A meta-analysis performed by O'Connor and Paunonen [26] on the relationship between personality traits and academic achievement confirmed this and showed conscientiousness to be the trait most strongly and consistently associated with academic success.

Grit, self-control, self-discipline and conscientiousness belong mainly to the intellectual but possibly also to the emotional dimension of wellness (ID & ED).

2.2.5 Emotional intelligence

The Sommerville study [27], a 40 year longitudinal investigation of 450 boys who grew up in Sommerville, Massachusetts, is an example of research that emphasizes the limits of IQ and promotes the potential of emotional intelligence as a predictor. Two-thirds of the boys were from welfare families, and one-third had IQ's below 90. However, IQ had little relation to how well they did at work or in the rest of their lives. What made the biggest difference was childhood abilities such as being able to handle frustration, control emotions, and get along with other people.

Amanda Swart at the University of Pretoria in South Africa administered an emotional intelligence test to 448 first-year students, separated the students into successful and unsuccessful groups based on grades, and found the successful group to have significantly higher emotional intelligence test scores [28].

Emotional intelligence belongs to the emotional dimension of wellness (ED).

2.2.6 Equanimity

T Alexander Astin and his colleagues at UCLA [29] developed the Equanimity Scale and report on its development in the ground-breaking book "Cultivating the Spirit: How College Can Enhance Students' Inner Lives". Equanimity is associated with a sense of calm, peacefulness, centeredness and most importantly self-transcendence, the ability to rise above or move beyond the limits of personal experience. Equanimity also has a substantial affective component: feeling "at peace", feeling "good". There is also the suggestion of subtle affective states (peacefulness, calm, acceptance of things as they are) in words such as "gift", "thankful" and "find meaning".

Students with high equanimity scores, compared to those with lower scores, tend to get better grades in college, report higher levels of psychological well-being, and be more satisfied with their overall college experience.

Equanimity belongs to the spiritual dimension of wellness (GD).

2.2.7 Character strengths

The Values in Action (VIA) Classification of Strengths is a Positive Psychology project that focuses on what is right about people and more specifically about the strengths of character that contribute to optimal development across the lifespan. Park and Peterson [30] found that students' academic achievement is predicted by a set of character strengths: Perseverance, love, gratitude, hope, and perspective. They predict academic achievement both in high school and college. Lounsbury and his colleagues [31] found that sixteen of the VIA strengths were significantly positively correlated with GPA with persistence having the highest and modesty the lowest correlation. Higher magnitude correlations with GPA were observed for the VIA strengths of persistence, self-regulation, love of learning and prudence. Research also suggests that students who frequently use their signature strengths earn higher marks - this effect, however, depends on the level of strengths-course fit [32]. There therefore is substantial evidence of a strong relationship between character strengths and academic achievement.

It should be clear that a considerable overlap exists between these character strengths and some of the wellness factors discussed previously. *All six wellness dimensions are implied.*

2.2.8 Positive emotions / positivity

Fredrickson [33] found that when positive emotions outweigh negative emotions at a ratio of 3 to 1 people begin to flourish. Fredrickson's work shows that this positivity ratio is a stable tipping point above which humans flourish and below which people languish. Eighty percent of Americans score under 3 to 1. Ratios of 1 to 1 or less are suggestive of depression. At ratios of 5 and 8 to 1 she finds people are truly flourishing and following an upward spiral in physical, emotional, cognitive and social health. A meta-analysis of 300 studies, including 275,000 people, shows that positive emotions produces success in life as much as it reflects success in life. Flourishing students should therefore outperform languishing students academically and should strive to experience at least three times more positive emotions than negative emotions!

Positive emotions clearly belong to the emotional dimension of wellness (ED).

2.2.9 Curiosity

Von Slumm and her colleagues [34] reviewed data from 200 studies that looked at how 50,000 students rated their own intellectual curiosity and other factors. Curiosity turned out to be as important a factor as conscientiousness. When put together, conscientiousness and curiosity had as big an effect on performance as intelligence. They concluded that their results highlight that a "hungry mind" is a core determinant of individual differences in academic achievement.

Curiosity belongs to the intellectual dimension of wellness (ID).

2.2.10 Mental toughness

Studies done in schools, colleges and universities in the United Kingdom and Holland show that there is a close link between mental toughness and the performance of students taking tests and exams [35]. These studies consistently show that up to 25% of the variation in a student's exam performance can be explained by their mental toughness. Mental toughness here is defined in terms of the 4Cs model – it is a product of four pillars, namely challenge (seeing challenge as an opportunity),

confidence (having high levels of self-belief), commitment (being able to stick to tasks) and control (believing that you control your destiny) and is measured by the MTQ48 [35].

Mental toughness belongs mainly to the intellectual dimension of wellness (ID).

2.3 Profile of a successful and “perfect” student

The “perfect”, successful student obtains high scores for each of the physical, emotional, intellectual, occupational, social and spiritual dimensions of wellness. This balanced wellness is reflected by the presence of most of the specific wellness factors that positively affect academic achievement in his make-up.

The “perfect” student therefore exercises optimally, maximizes his hope and optimism, has “get-better” goals and a growth mindset, is gritty, self-disciplined and mentally tough, exhibits self-control, is conscientious and curious, maximizes his emotional intelligence, minimizes his procrastination, grows his equanimity, strengthen his signature strengths and maximizes his positive emotions. The successful student is a flourishing student with a positive inner world experience.

3 WEB-BASED TOOLS TO SUPPORT THE DEVELOPMENT OF WELLNESS AND THE OPTIMISATION OF ACADEMIC PERFORMANCE

A collection of wellness surveys, websites and multimedia products were developed to support the development of wellness in general (Hettler’s model) and to address the needs associated with the specific wellness factors that affect academic performance and which were discussed in the last section. These resources are potentially available to mentors, life coaches and students, and can be used in both structured and unstructured programmes. A number of these tools has already been implemented, is used in research and support programmes and is available on the intranet to students. Others are still in the development phase. The tools also include a tracking component - all interactions are recorded on a user’s personal web page.

The tools can be divided into surveys and guides, multimedia products, and tracking applications. What follows is a brief description of each of the surveys, guides and multimedia products, with references to the wellness factors they attempt to address and to the way the tracking component is implemented.

3.1 Wellness surveys and guides

The main aim of the surveys in sections 3.1.1 to 3.1.3 is to support students at SU to optimise their wellness in the six dimensions of Hettler’s model (see sections 1 and 2.1). The self-report questionnaires listed in section 3.1.4 target specific wellness factors from section 2.2.

3.1.1 The EquipU4 Wellness Index

The EquipU4 Wellness Index (EU4WI) is an instrument that allows the user to determine how well he¹ is. It is an attempt to measure wellness in the physical, emotional, intellectual, occupational, social and the spiritual dimensions. It also identifies areas where life style changes will benefit the user most and which will lead to optimal self-improvement. The EU4WI was developed on a sound scientific basis and is a very useful self-improvement utility. It consists of 100 items. It automatically calculates and displays a user’s overall wellness score and his score in each of the six dimensions. An interpretation of the scores is also provided.

A user’s personal web page is updated with his scores, interpretations of his scores, suggestions on possible and essential life style changes and recommendations on which wellness habits he should improve. Links to web sites, videos and other resources are also posted to help the user on his wellness journey and in facilitating behaviour change. Updates to these pages are made daily.

3.1.2 The Wellness Web Resources and Video Allocation Surveys

Users complete this brief surveys by simply indicating in which wellness topics they are interested, in which areas of wellness they have a need and about which topics they consequently want to learn more about. Lists of relevant internet sites / YouTube videos for each of the chosen topics are then

¹ A student or user can be either male or female. Within this paper “he” is used to refer to a student / user.

recommended. Topics are organized according to the six dimensions of wellness, namely physical, emotional, intellectual, occupational, social and spiritual. A member's personal web page is updated daily with his choices and recommendations.

3.1.3 The HelpMe Support Survey for SU Students

The HelpMe Support Survey was created to simplify access to the HelpMe website (a site with hundreds of links to wellness pages written by student counselling experts from around the world and which is operational since 2008) and to guide students to easily find the information they are looking in order to address their needs. It streamlines the process of getting help. Students/members complete this brief survey by simply indicating in which wellness topics and skills they interested in, which areas of wellness they have a need or problem, and about which topics they consequently want to learn more about. A list of relevant HelpMe web pages with links to local contacts, internet resources and multimedia tools is immediately recommended to the student.

Topics (in the survey and on the HelpMe site) are organized according to the six dimensions of wellness. Additional options allow you access to financial pages and a series of sites that were not allocated to one of the wellness dimensions specifically, including local contacts.

A member's personal web page is updated daily with his choices and recommendations.

3.1.4 Self-report questionnaires to measure factors affecting academic achievement

The following questionnaires are currently being used in research projects to measure some of the specific wellness factors (section 2.2) that have been shown to affect academic achievement and to provide guidance to students.

- The Adult Hope Scale, measuring hope (section 2.2.2);
- The Grit Scale, measuring grit (section 2.2.4);
- The Goal and Grit Scale, measuring grit, “be-good” and “get-better” goals, and mindset (section 2.2.3 and 2.2.4);
- The Brief Self-control Scale, measuring Baumeister’s self-control (section 2.2.4);
- The Big Five Aspects Scales, measuring the big five personality traits and conscientiousness in particular (section 2.2.4);
- The Procrastination Scale, measuring procrastination(section 2.2.4);
- The Equanimity Scale, measuring equanimity (section 2.2.6);
- The VIA Character Strengths Profile (www.viame.org) (section 2.2.7);
- The Positive Ratio, measuring the ratio between positive and negative emotions (section 2.2.8);
- The Curiosity and Exploration Inventory (CEI) (section 2.2.9); and
- The MTQ48, a mental toughness assessment (<http://www.assessmentsonline.co.za/mtq48.asp>) (section 2.2.10).

Internet-based versions of these questionnaires were designed with Formstack [36] (except for the VIA Character Strengths Profile that must be taken from the developer’s website and the MTQ48 that must be paid for). Permission to use the instruments that are not in the public domain has been or is in the process of being obtained from the intellectual property owners. These Formstack designed questionnaires act as stand-alone self-help facilities – they assess a specific wellness factor and then give immediate feedback (also via email) that includes the results of the questionnaire and personalised recommendations on how the user can develop specific aspects highlighted by the assessment. Participants taking the Grit Scale, for example, will receive feedback regarding their scores and will also get access to the Grit website (www.sun.ac.za/grit) and multimedia modules that will inspire them to become grittier! These personalised recommendations most probably will include links to one or more of the wellness resources and multimedia products which are described in the next section. A student's personal web page is also updated daily with his choices and recommendations.

3.2 Wellness resources and multimedia products

3.2.1 Internet resources on wellness

High quality web resources on wellness were compiled. They can be used independently, but are also used in the individualized recommendations within the support surveys listed above. The HelpMe website is an example of a resource that can be used independently – it was designed with links to wellness material developed by student counselling centres worldwide. The HelpMe website also includes local information and links to multimedia. A website to support the Grit Scale is also available (www.sun.ac.za/grit).

3.2.2 A library of multimedia collections on generic soft skills

The production of multimedia interventions was outsourced to a business unit (EquipU4). EquipU4 specializes in products and services that develop generic soft skills in people. EquipU4 obtains its product titles from a variety of sources: Some are created in-house (for example a DVD on study skills (LearnWell4Life) – see www.equipu4.com), but the majority of its product titles are obtained from external resources, for which researchers and ghost writers are mostly responsible. These external titles still need some repackaging, but it creates enormous application opportunities. These multimedia resources are also integral to the recommendations made in the various self-report questionnaires and surveys listed in section 3.1 and already add tremendous value. The LearnWell4Life DVD, for example, has been available freely on the intranet of SU since 2007.

A library of multimedia titles, mostly ebooks and audio recordings, were compiled and covers the following 25 topics [37]: Study skills, examination skills, thinking skills, problem-solving skills, reading skills, time management, stress and anxiety management, goal setting, personal finance, career planning, career management skills, building self confidence, building self esteem, weight management, overcoming addictions like smoking, emotional problems like depression, anger and panic, assertiveness and shyness, communication skills, public speaking, relationship skills, leadership skills, health, exercise, healthy diet, and general wellness. These topics cover all six wellness dimensions and also address some of the specific wellness factors that affect academic performance and that were discussed earlier. These library titles are available on the intranet of SU.

3.2.3 UBWell2 (You Be Well Too) - A Conditioning Programme to Enhance Wellness

UBWell2 is an internet- and multimedia-based product on wellness. UBWell2 consists of a number of "Inspire-U-2"-modules (e.g. Inspire-U-2-B-Optimistic) [38], specifically designed to develop the various dimensions of wellness, a tracking component and individualized web pages for each student.

Each "Inspire-U-2-module" contains powerful quotations that inspire students to develop a specific characteristic. Thousands of quotations are incorporated in total. UBWell2 is available in eBook, multimedia slideshow, web-based flash and text formats. The multimedia versions contain voice, music and pictures (based on themes) and use accelerated learning principles. The web-based flash version of the "Inspire-U-2" modules has been in use for the last five years (available on the intranet).

Each student's interaction with UBWell2 is tracked via web forms: The student must indicate which type of modules he consulted on which date and for how long, provide his opinion about the quality and meaning of the modules, indicate to what life areas he is going to apply the lessons learnt and compile an action plan on integrating the lessons learnt in his life. All students have access to their own personalised and secure web pages that contain a complete record of their interactions with the various products and also summarise statistically how they have utilised the various products.

3.3 Tracking

Every user has a private and secure space on the intranet where a complete record of his interactions with the tools are recorded (described above). Every user can therefore keep track of his wellness and improvement efforts by studying his individualised member's page. The university can also monitor the overall wellness and progress of students by studying reports that are specifically compiled to summarise trends and volumes of interactions.

4 STATUS AND THE FUTURE

Most of the development work is complete and research is done continuously to improve the implementation. The next few phases include the training of life coaches and mentors to integrate the

tools within their coaching and mentoring, aggressive marketing efforts to encourage students to use the tools, the development of journal-like potential optimising interventions with tracking to further add value (and facilitate the creation of wellness habits) and the design of procedures to measure the impact of the tools on academic achievement.

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